

FIG. 1

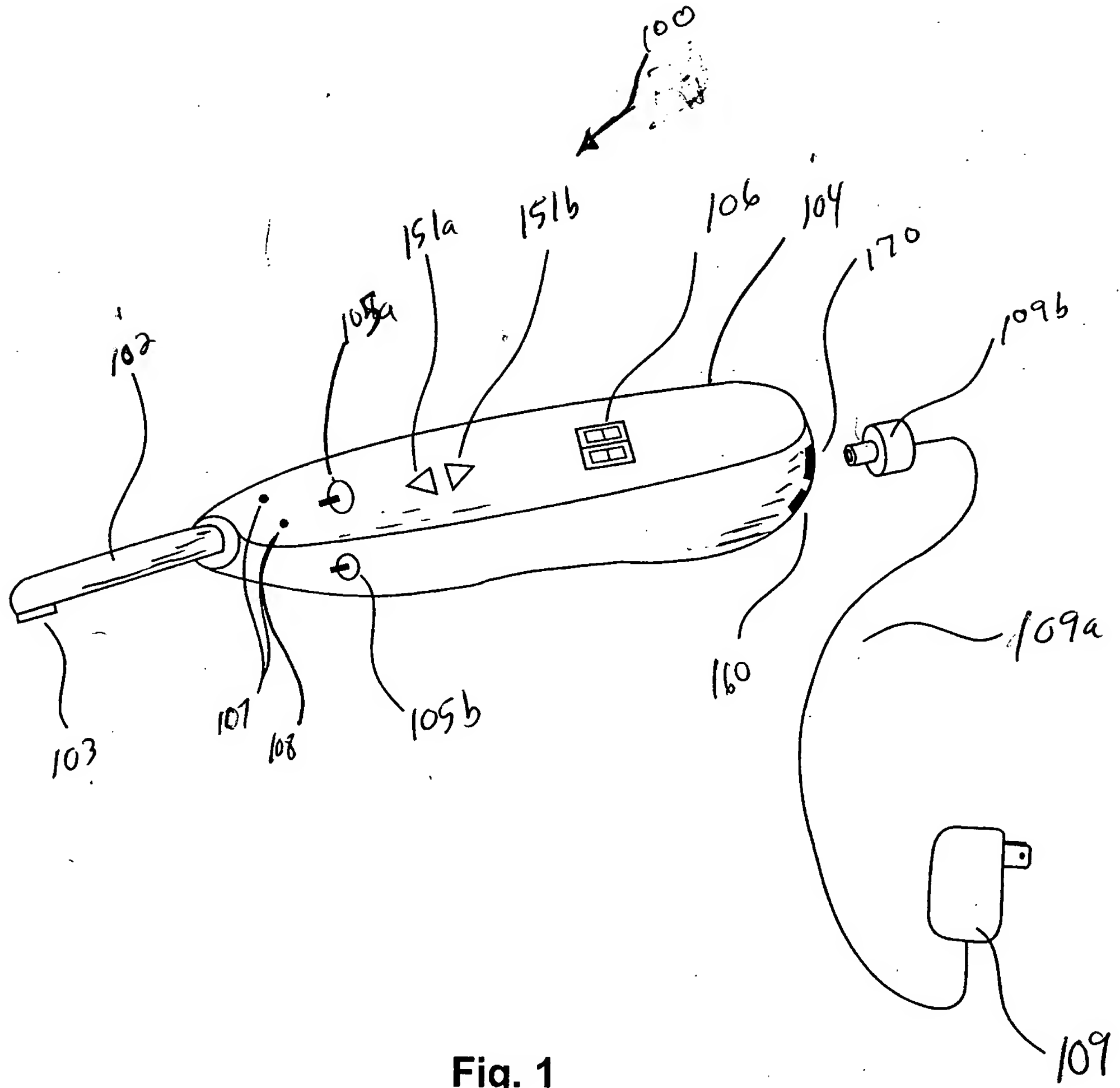


Fig. 1

✓

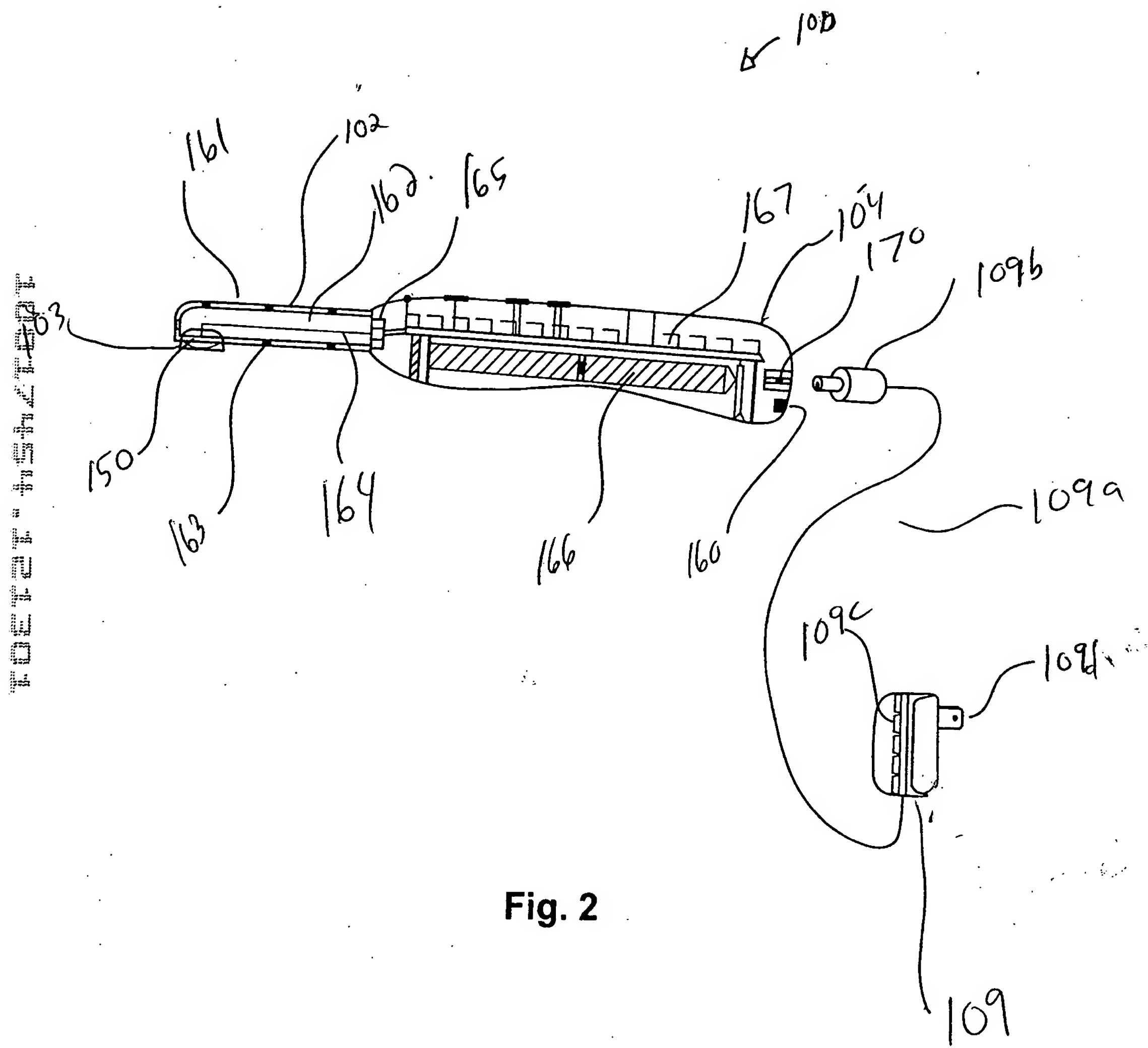


Fig. 2

✓

FIG. 3

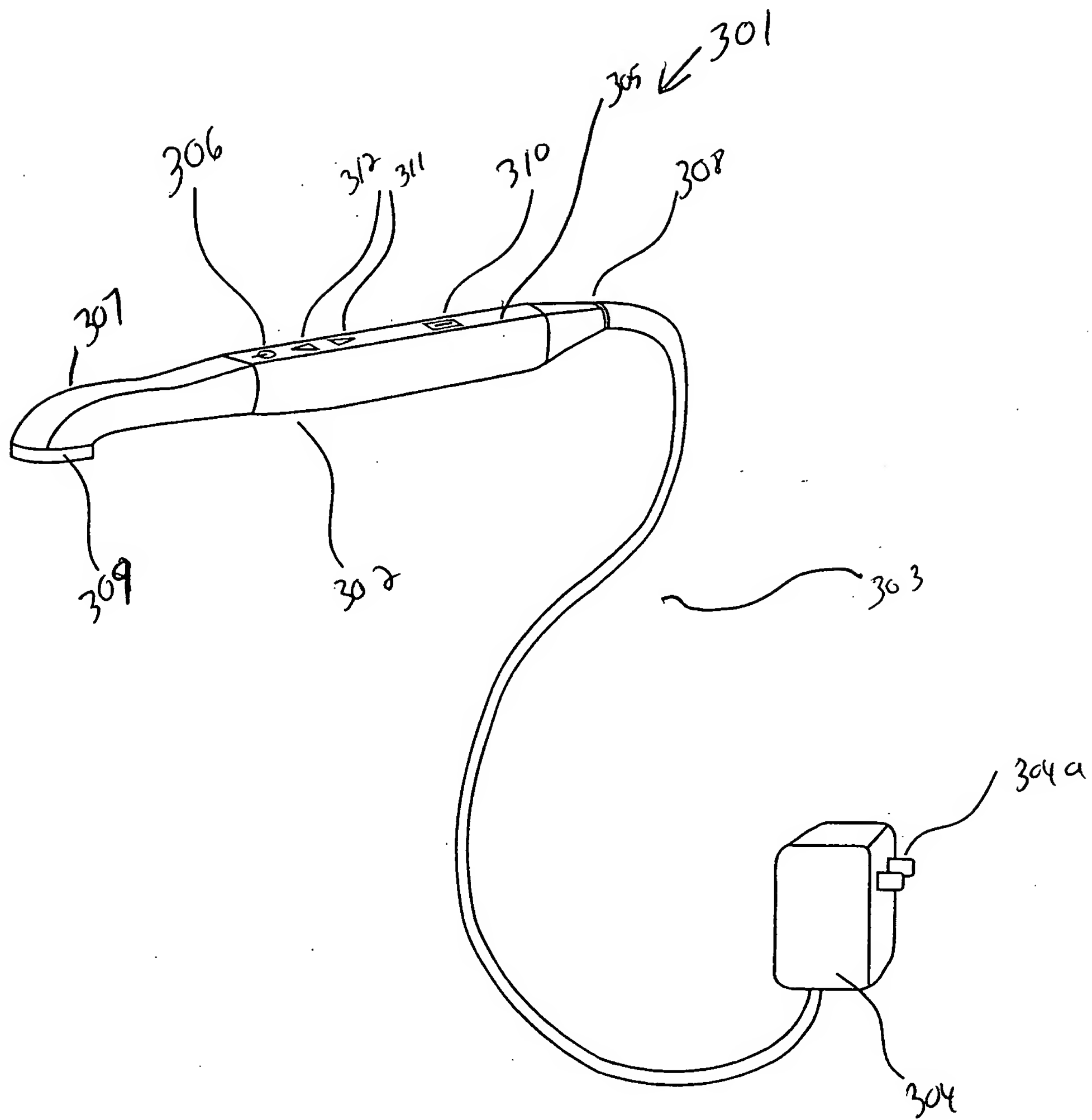


Fig. 3

✓

1001 1342 1001

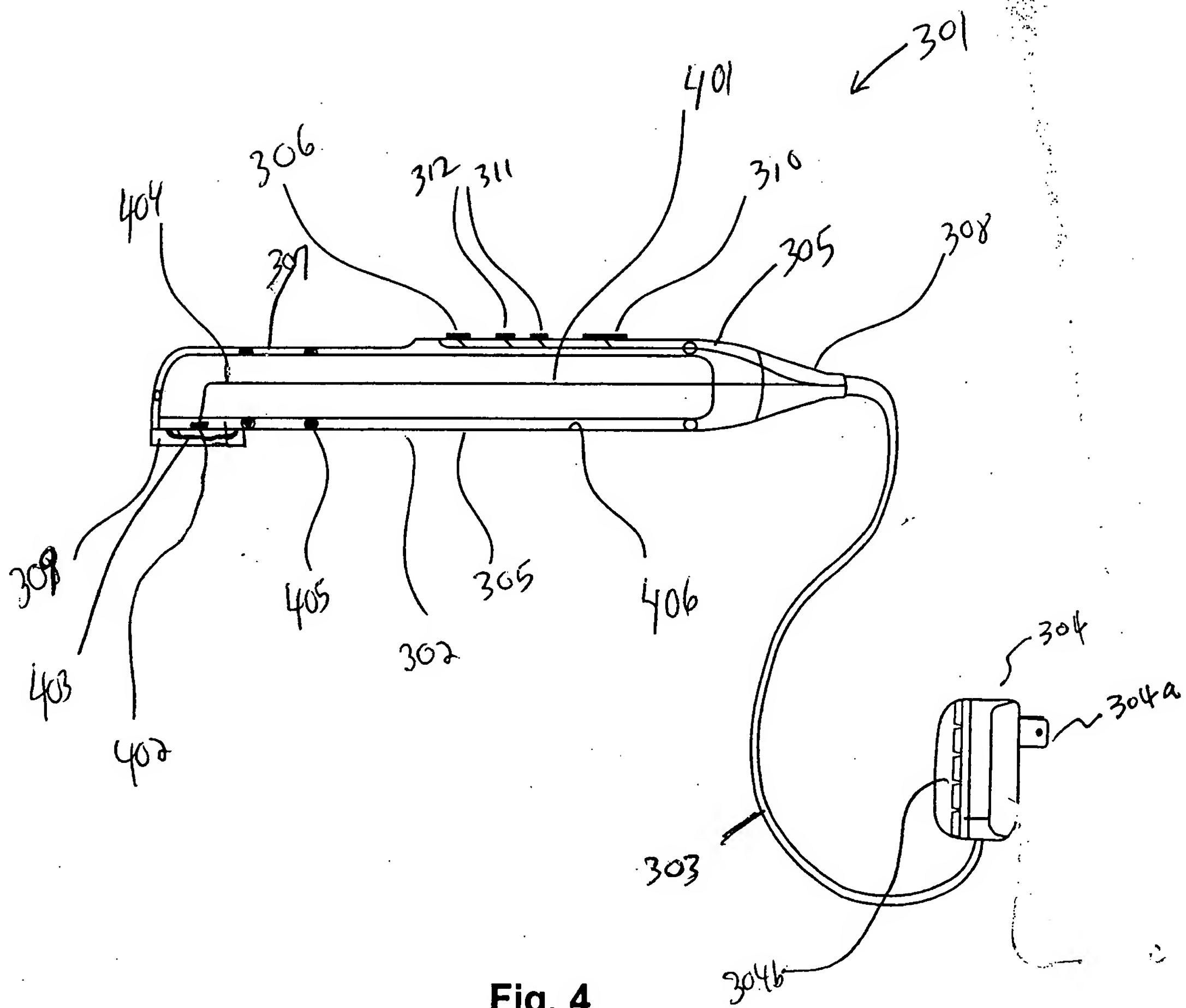


Fig. 4

FIG. 5

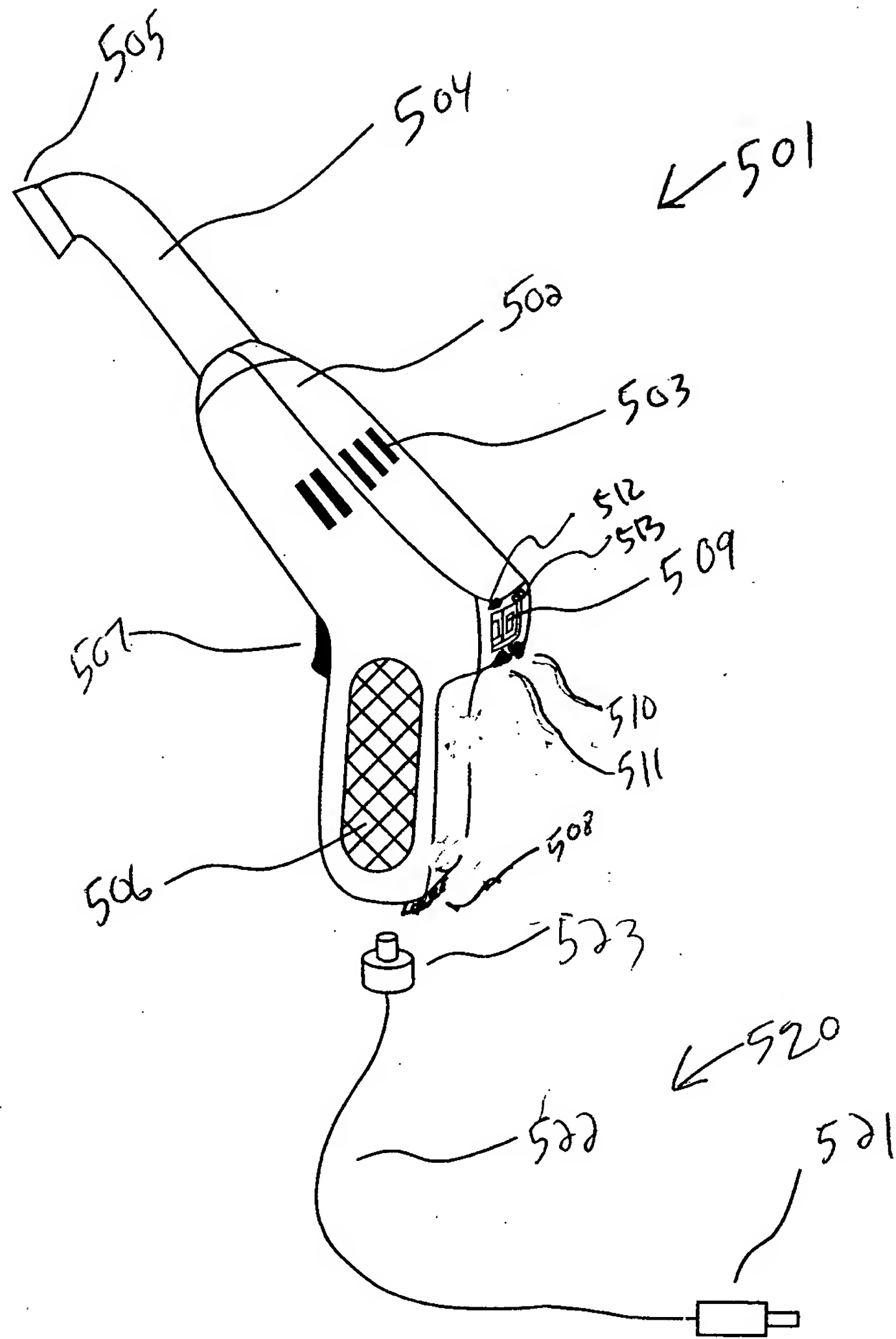


Fig. 5

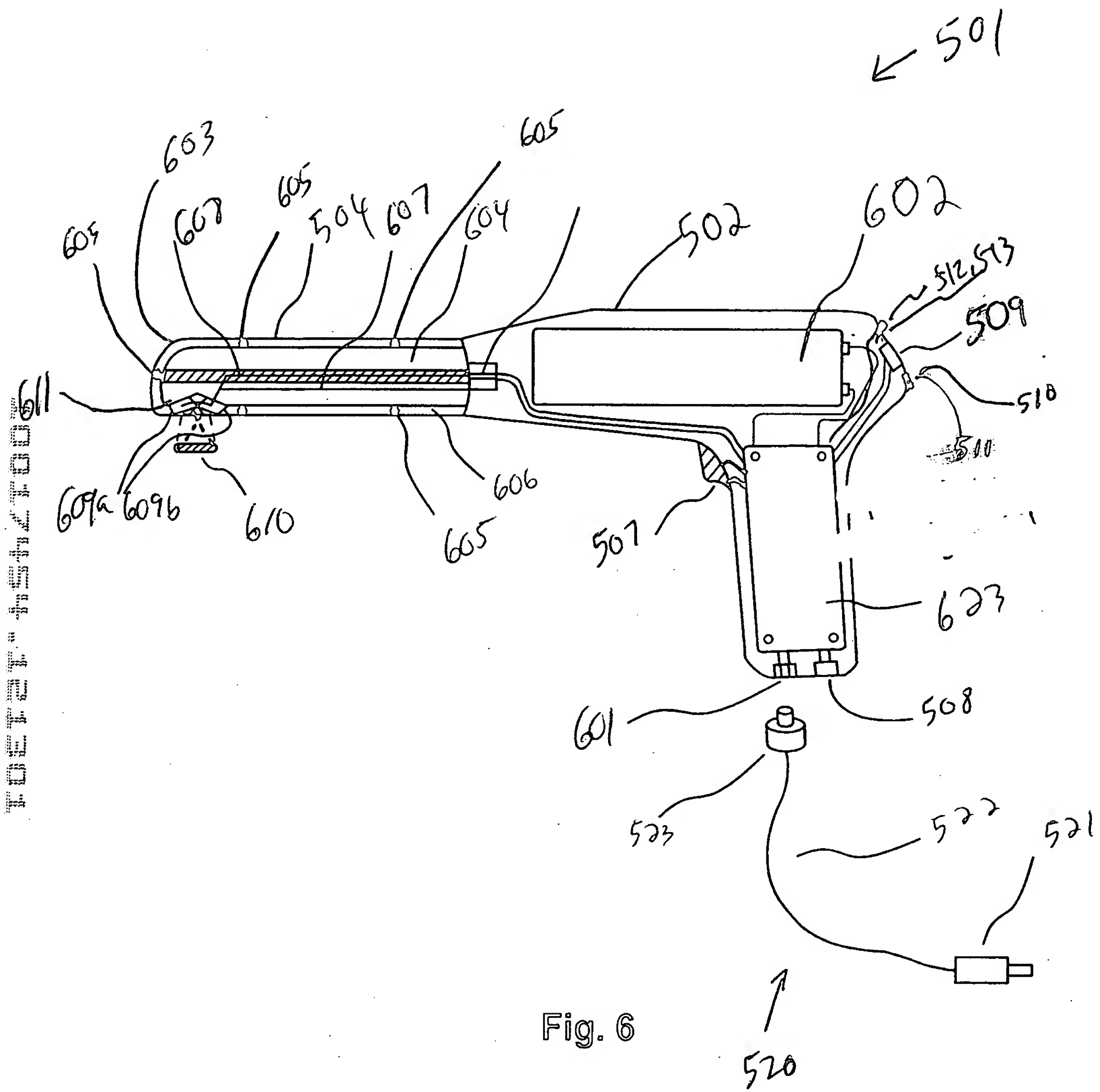


Fig. 6

10017454-124301

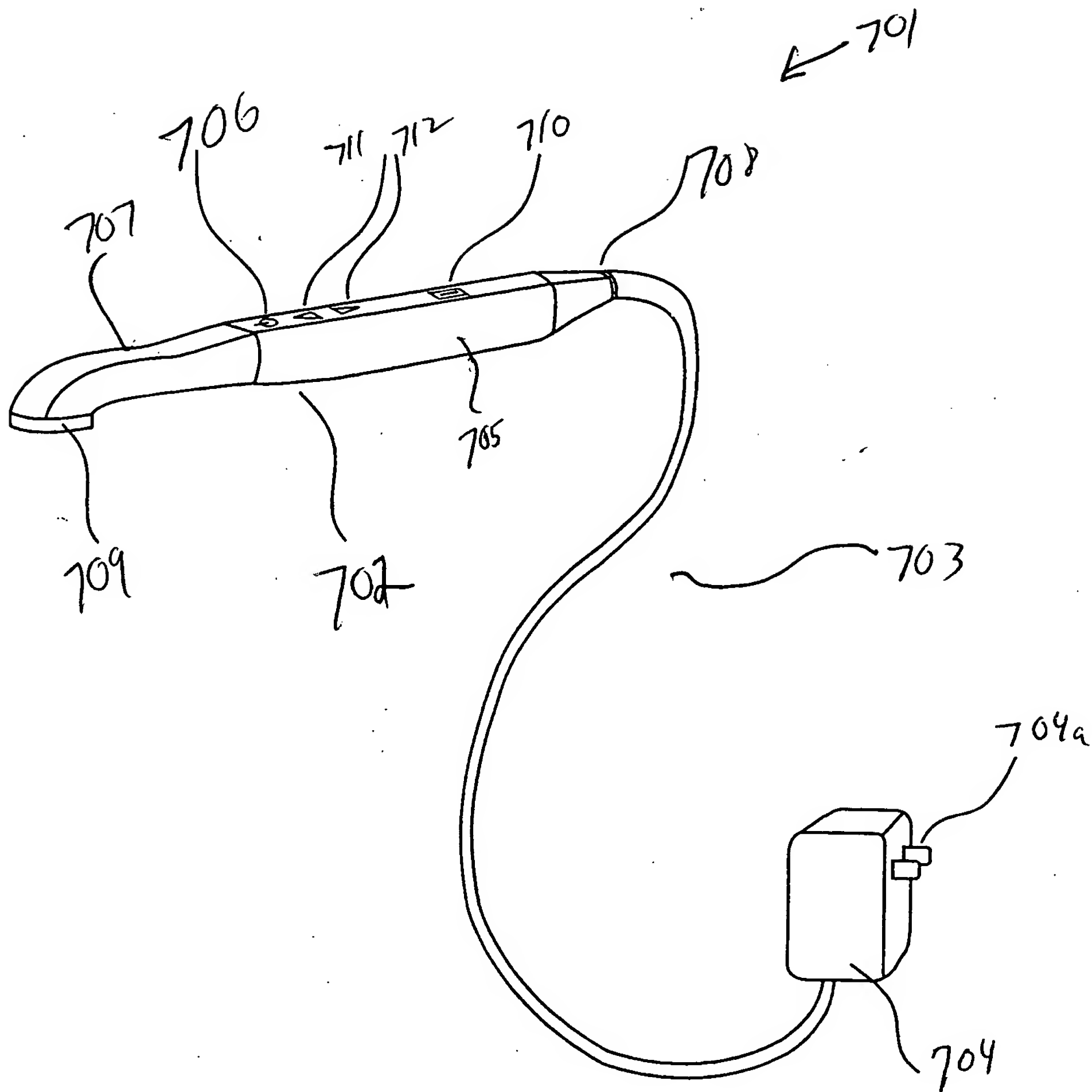


Fig. 7

✓

FIG. 8

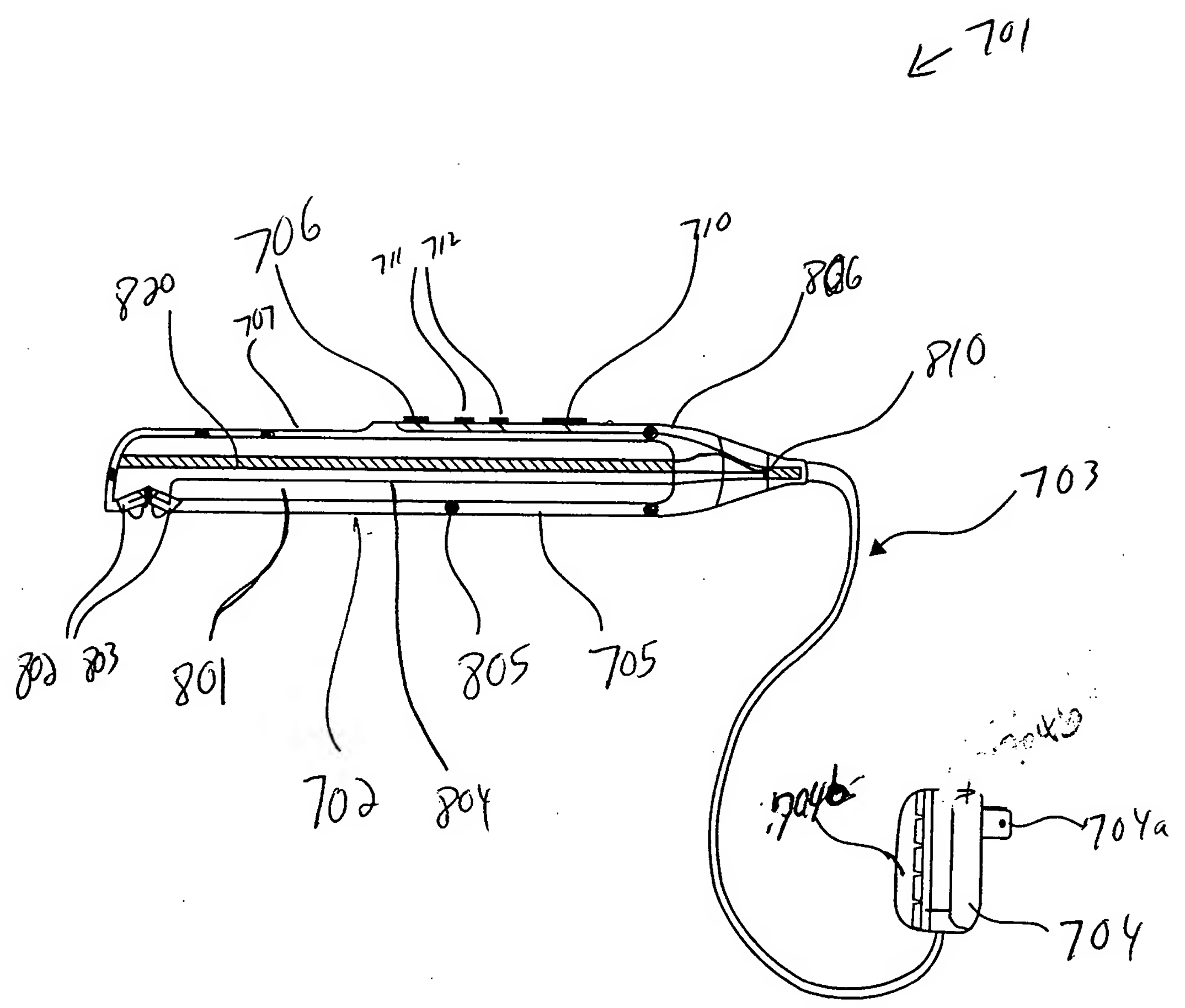


Fig. 8

✓



4047454-12304

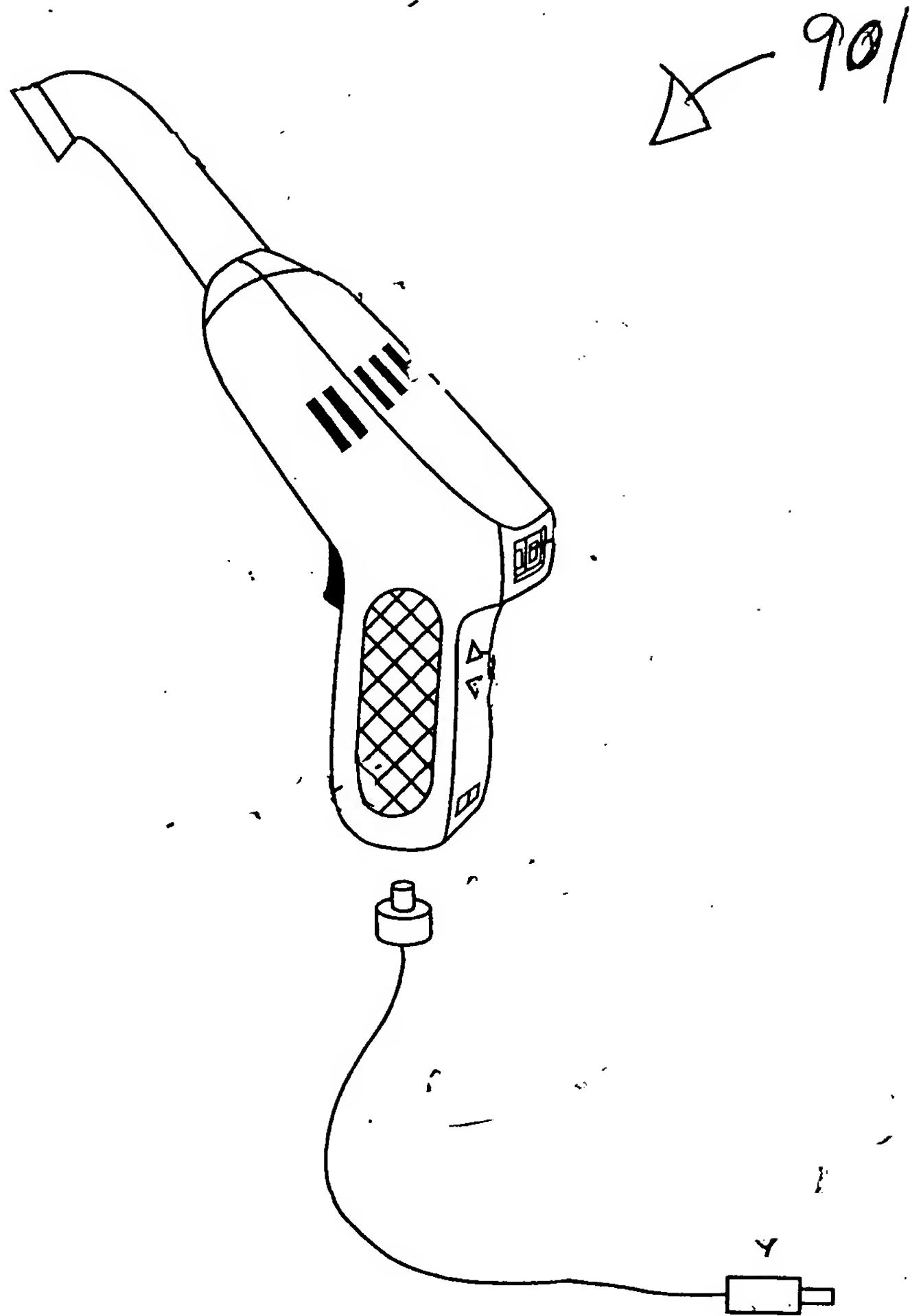


Fig. 9

✓

FIG. 10

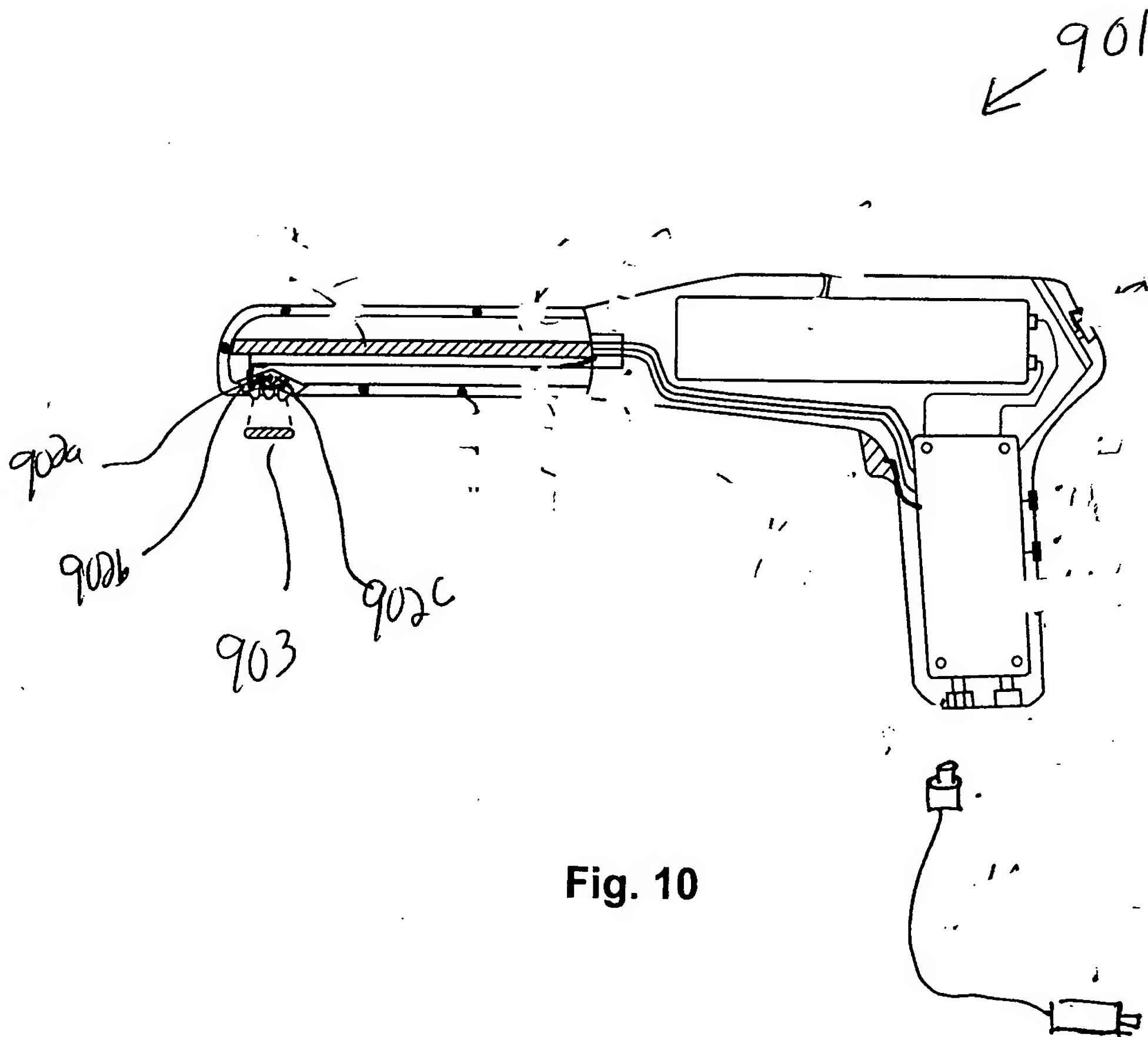


Fig. 10

✓

10017454-121301

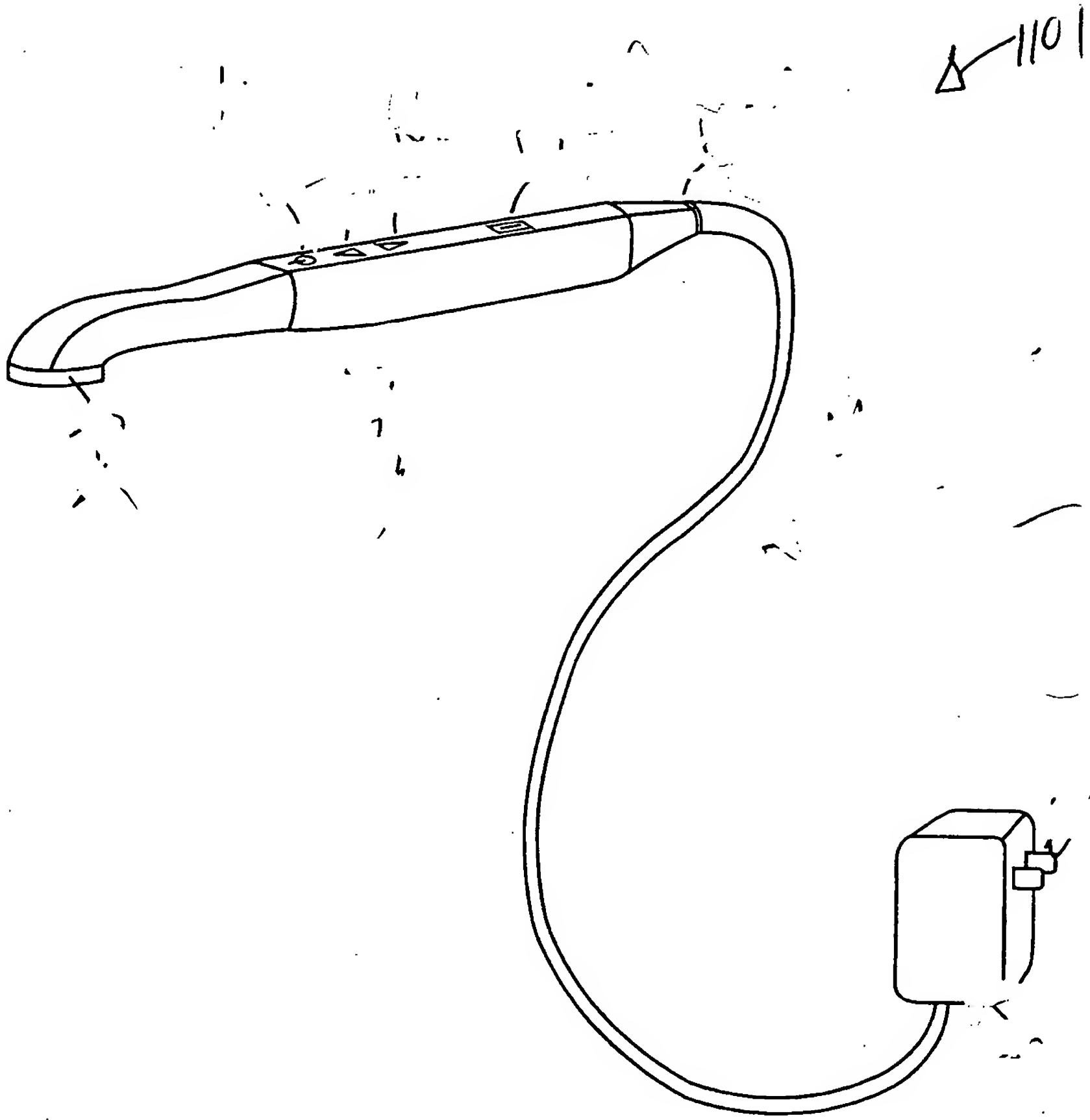


Fig. 11

✓

FIG. 12

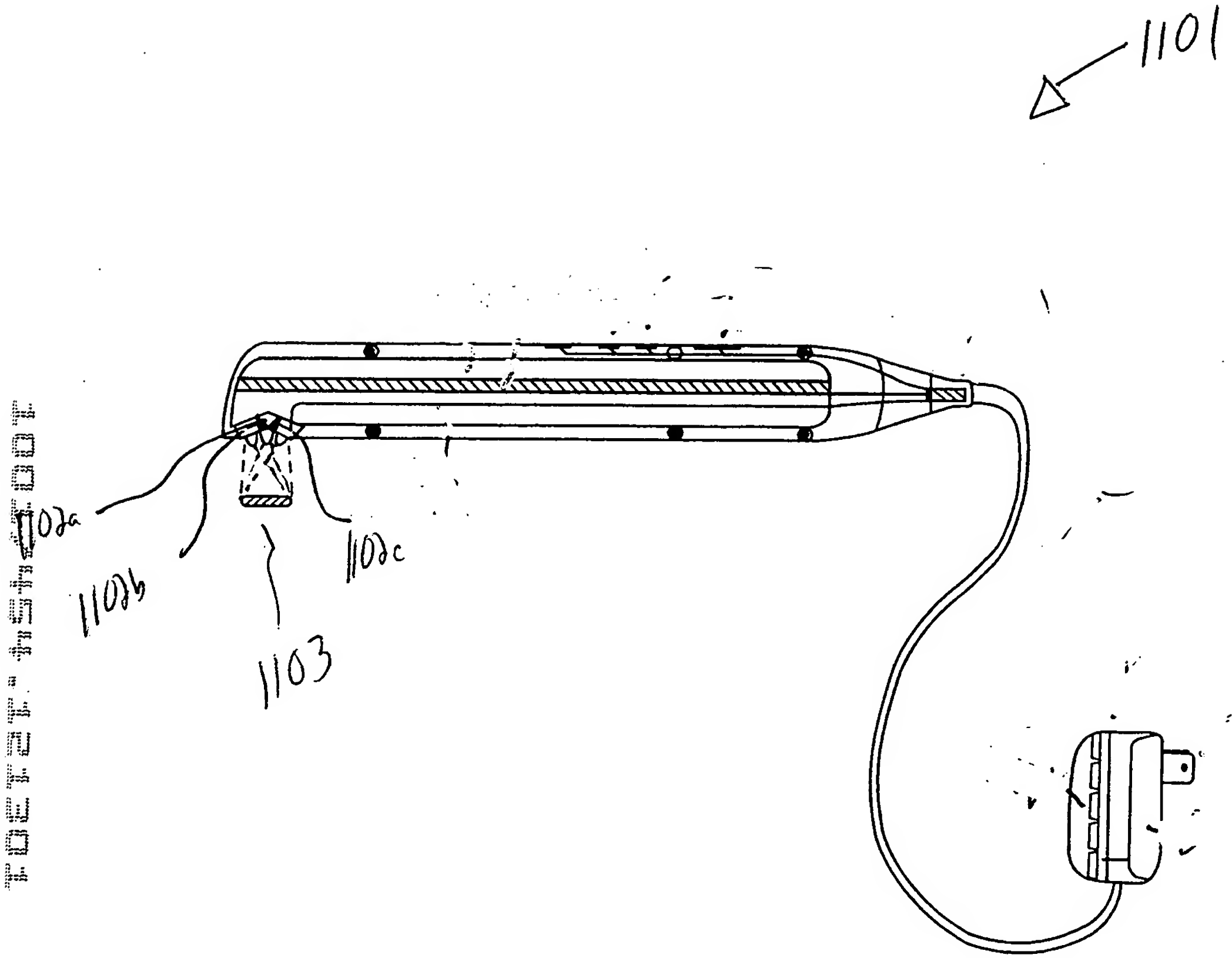


Fig. 12

2

FIG. 13

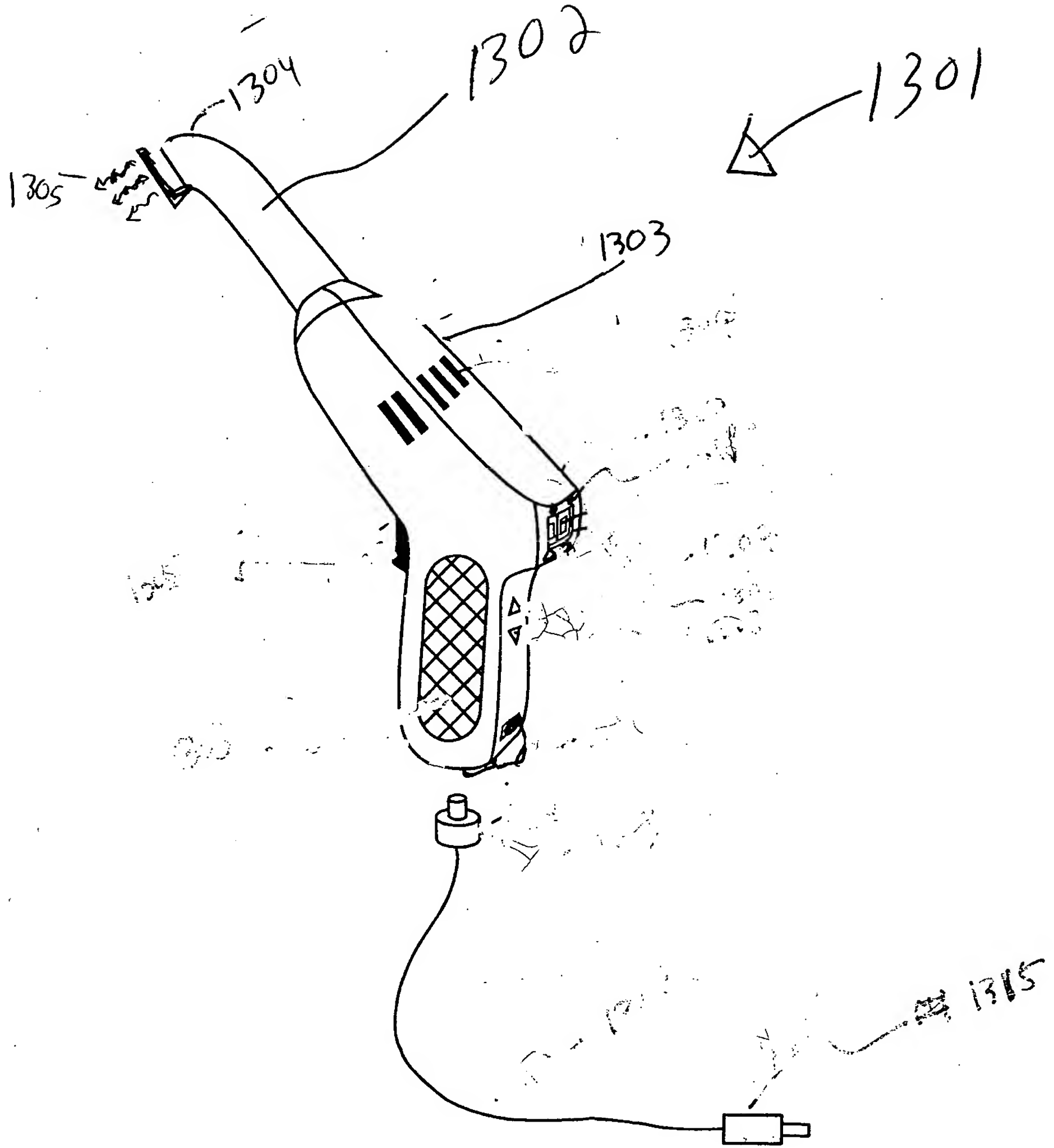


Fig. 13

✓

FIG. 14

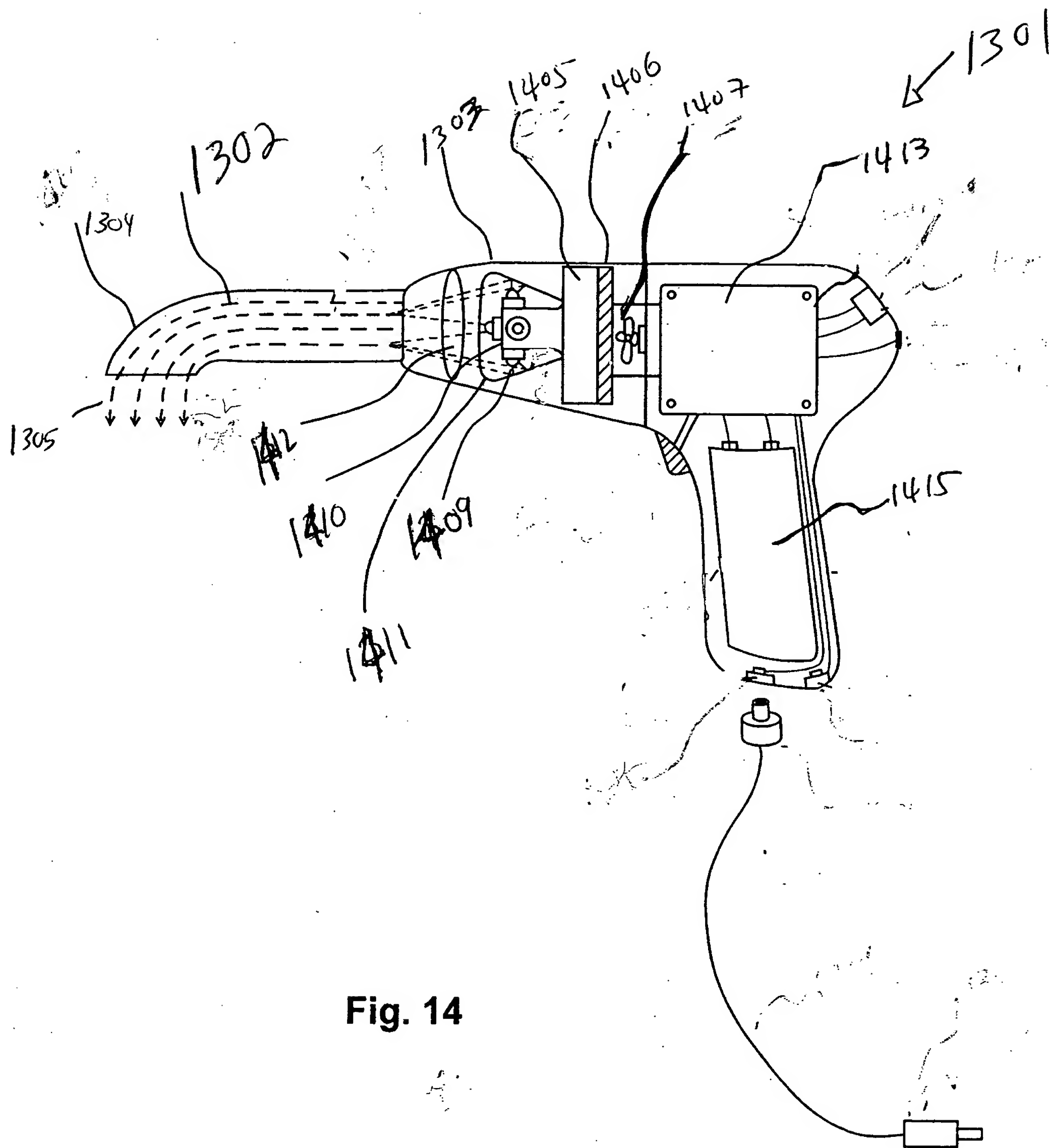


Fig. 14

FIG. 15

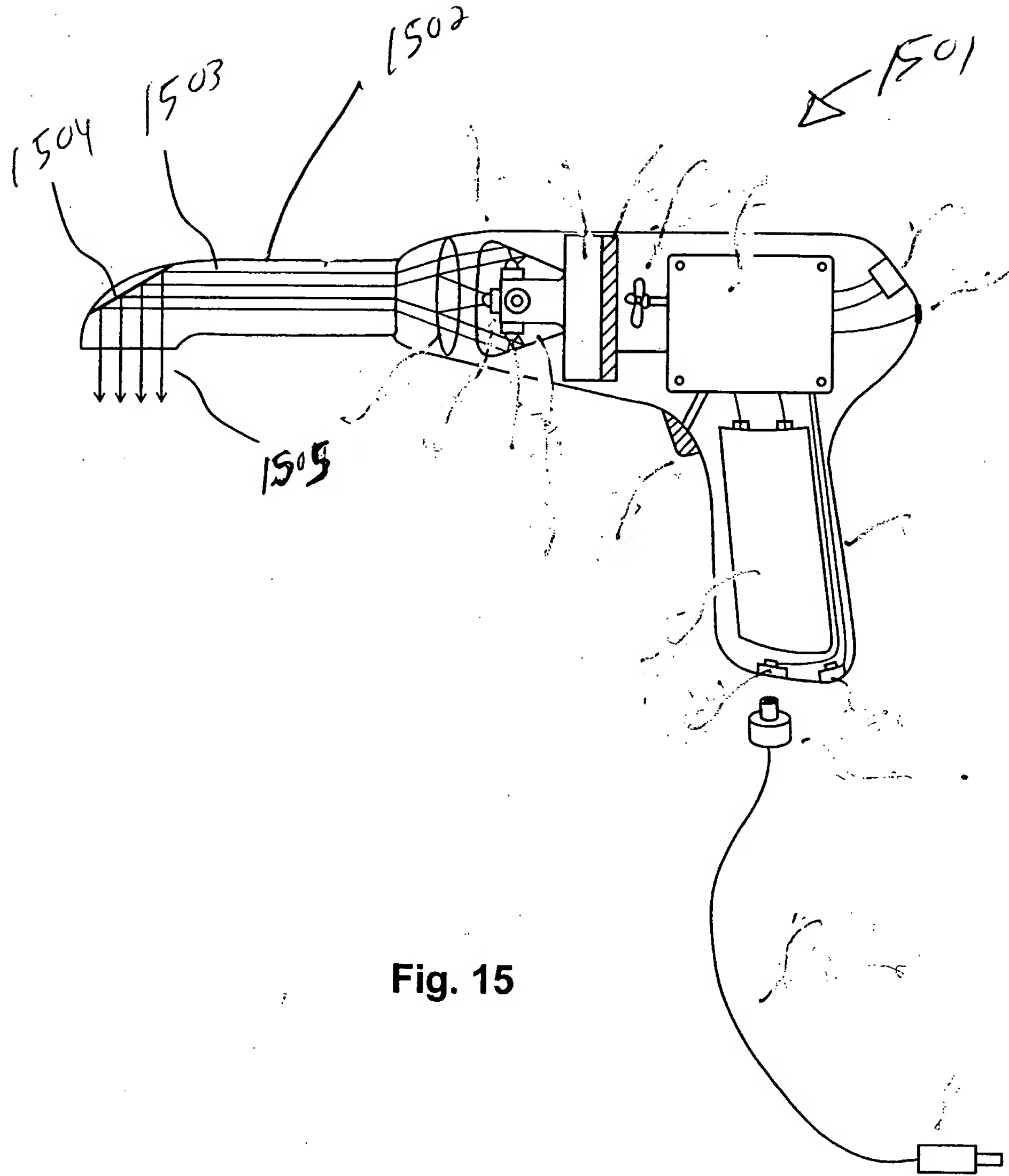


Fig. 15

10012454-121001

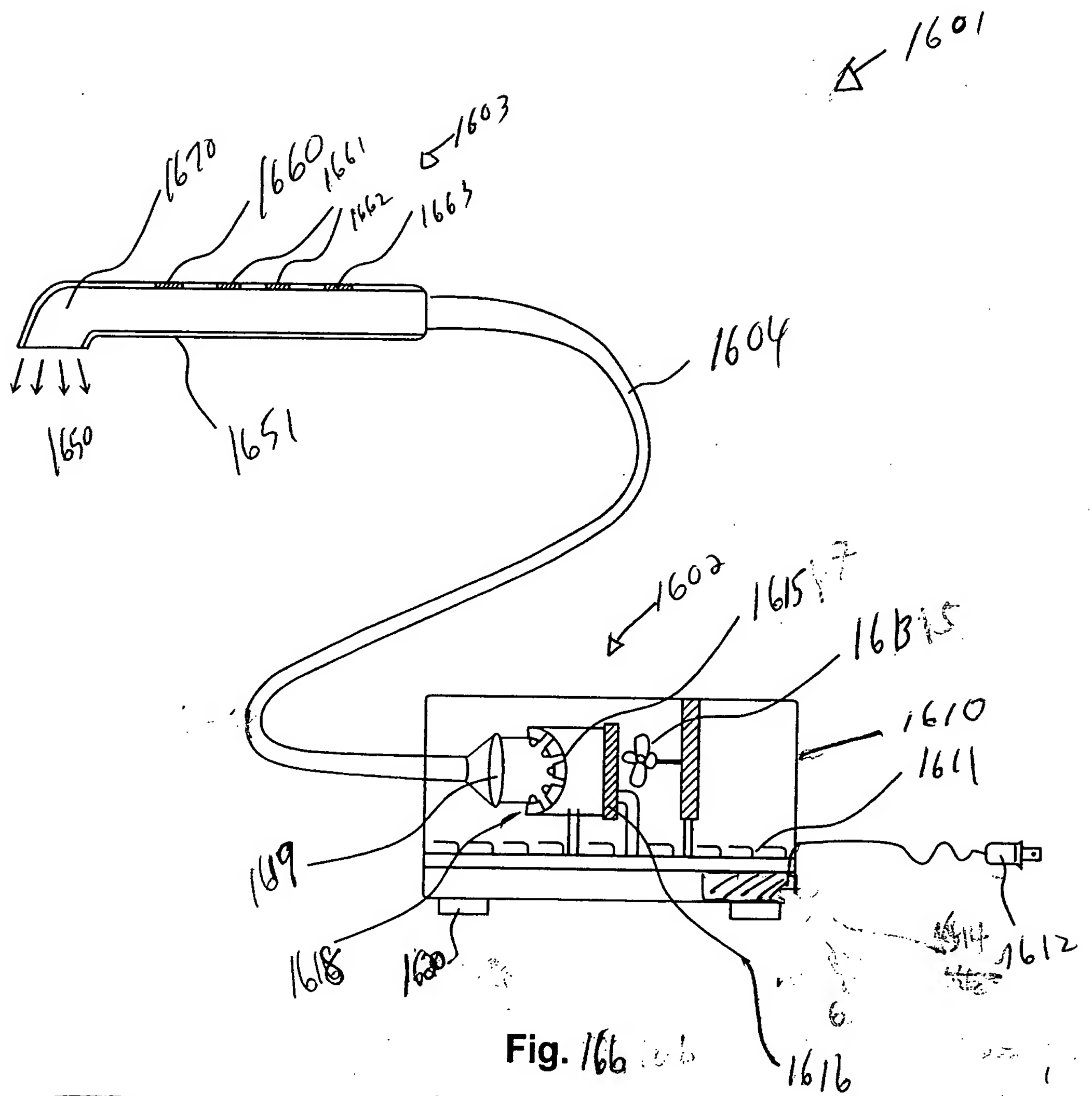
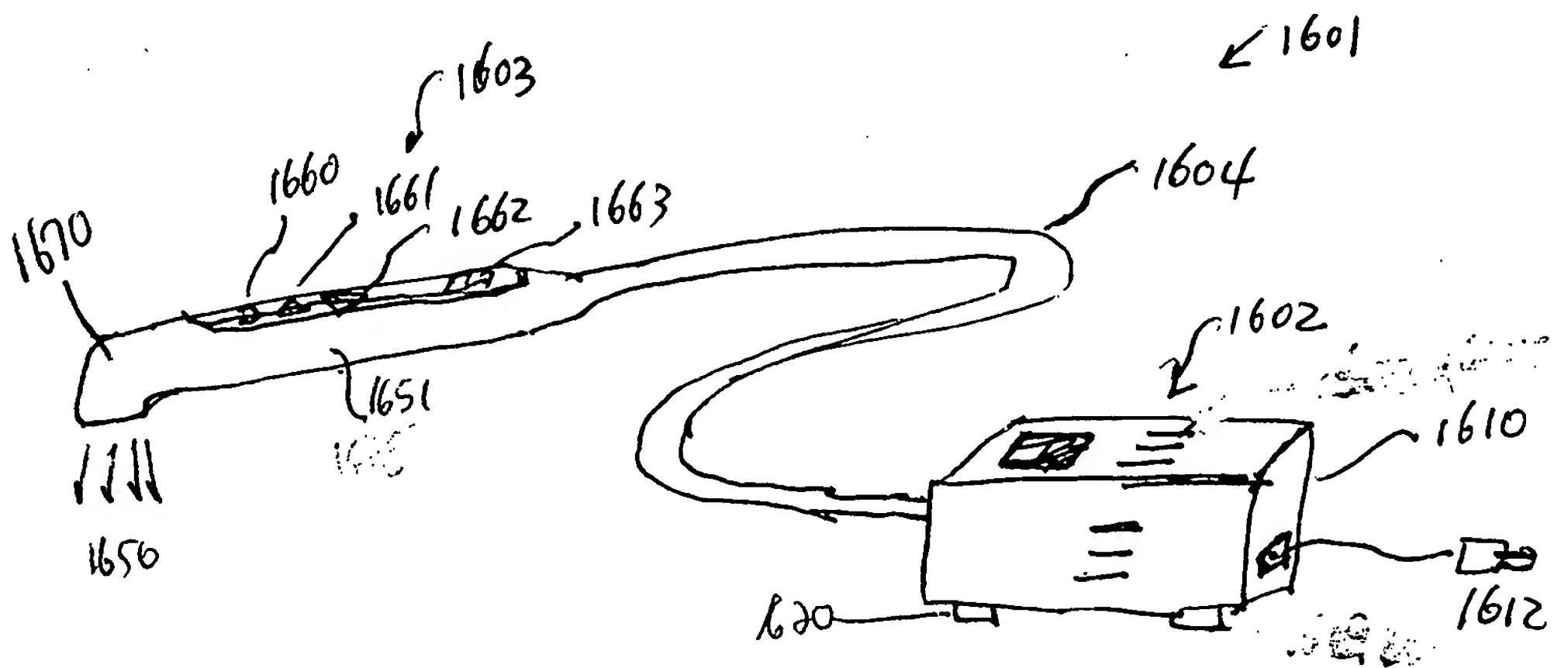


Fig. 16 a





A cross-sectional view of a GaN-based device structure. The structure consists of several layers: an insulative sapphire substrate (1802), a GaN buffer layer (1803), an n-GaN contact layer (1804), an n-AlGaIn cladding layer (1805), an InGaIn active layer (1806), a p-AlGaIn cladding layer (1807), and a p<sup>+</sup>GaN contact layer (1808). A top contact (1809) is formed on the p<sup>+</sup>GaN contact layer. A bottom contact (1810) is formed on the n-GaN contact layer. A gate (1801) is formed on the p-AlGaIn cladding layer. The gate is connected to the top contact (1809) and the bottom contact (1810).

Fig. 18a

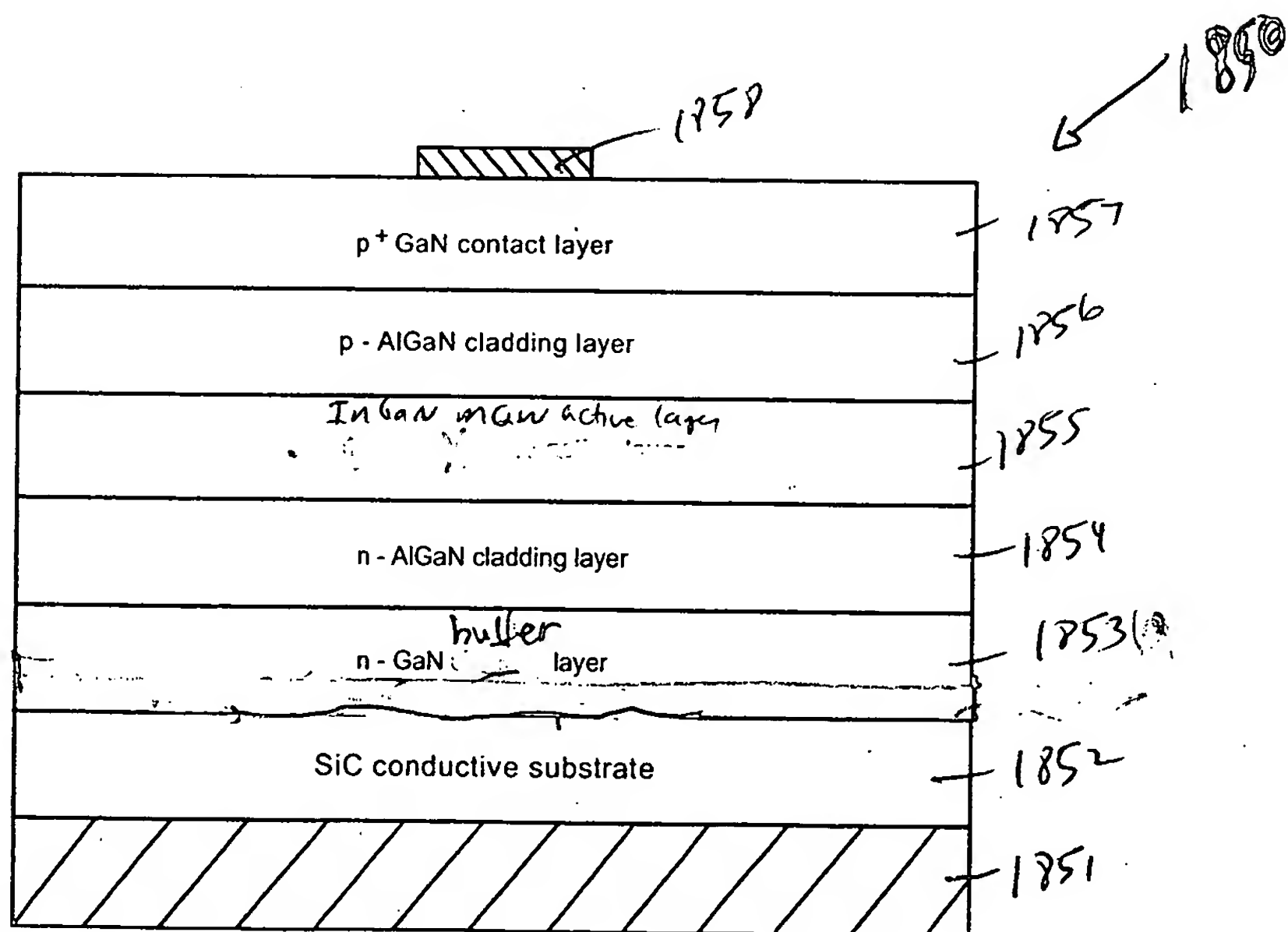


Fig. 186

FIG. 19a

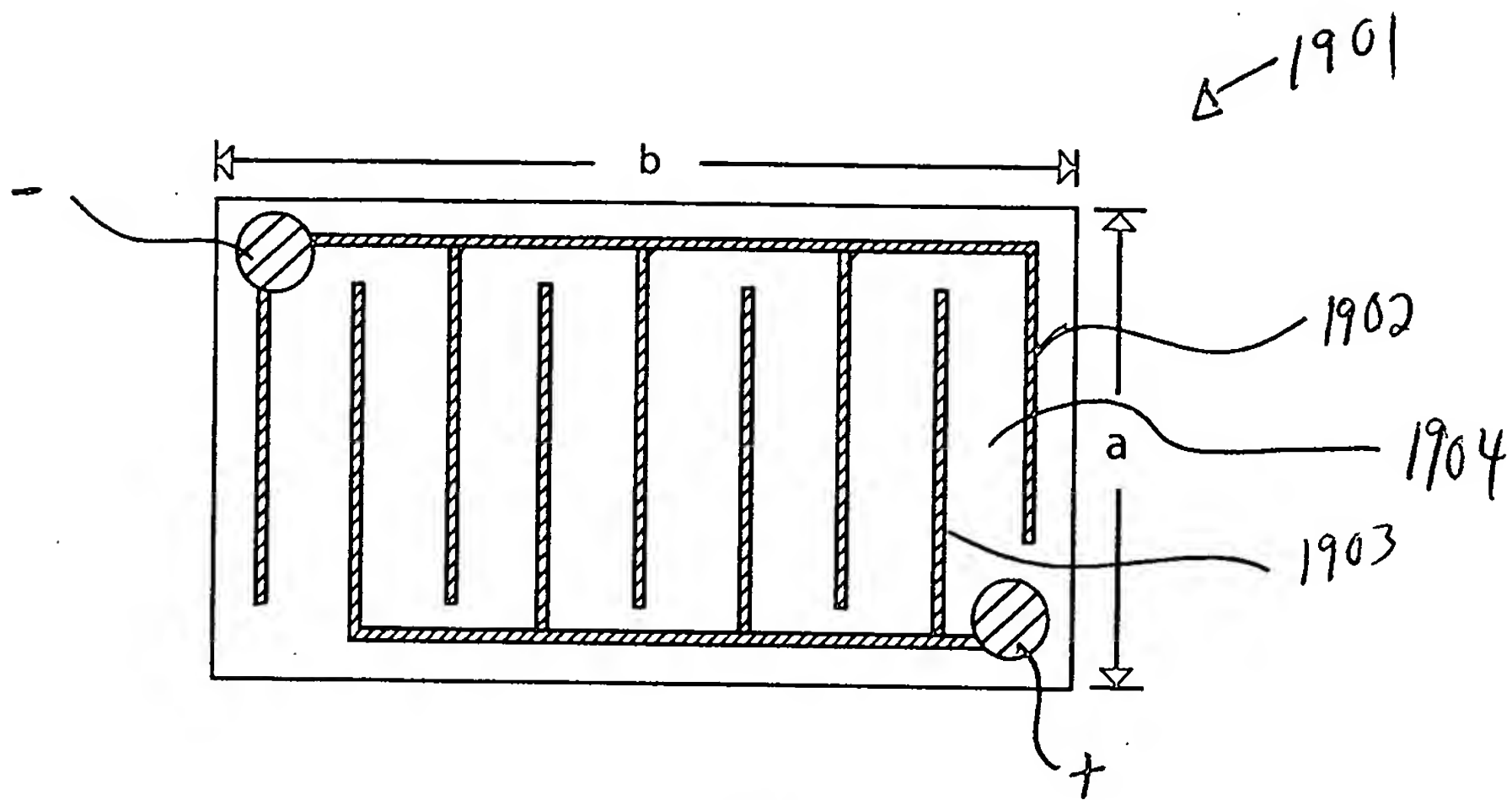


Fig. 19a

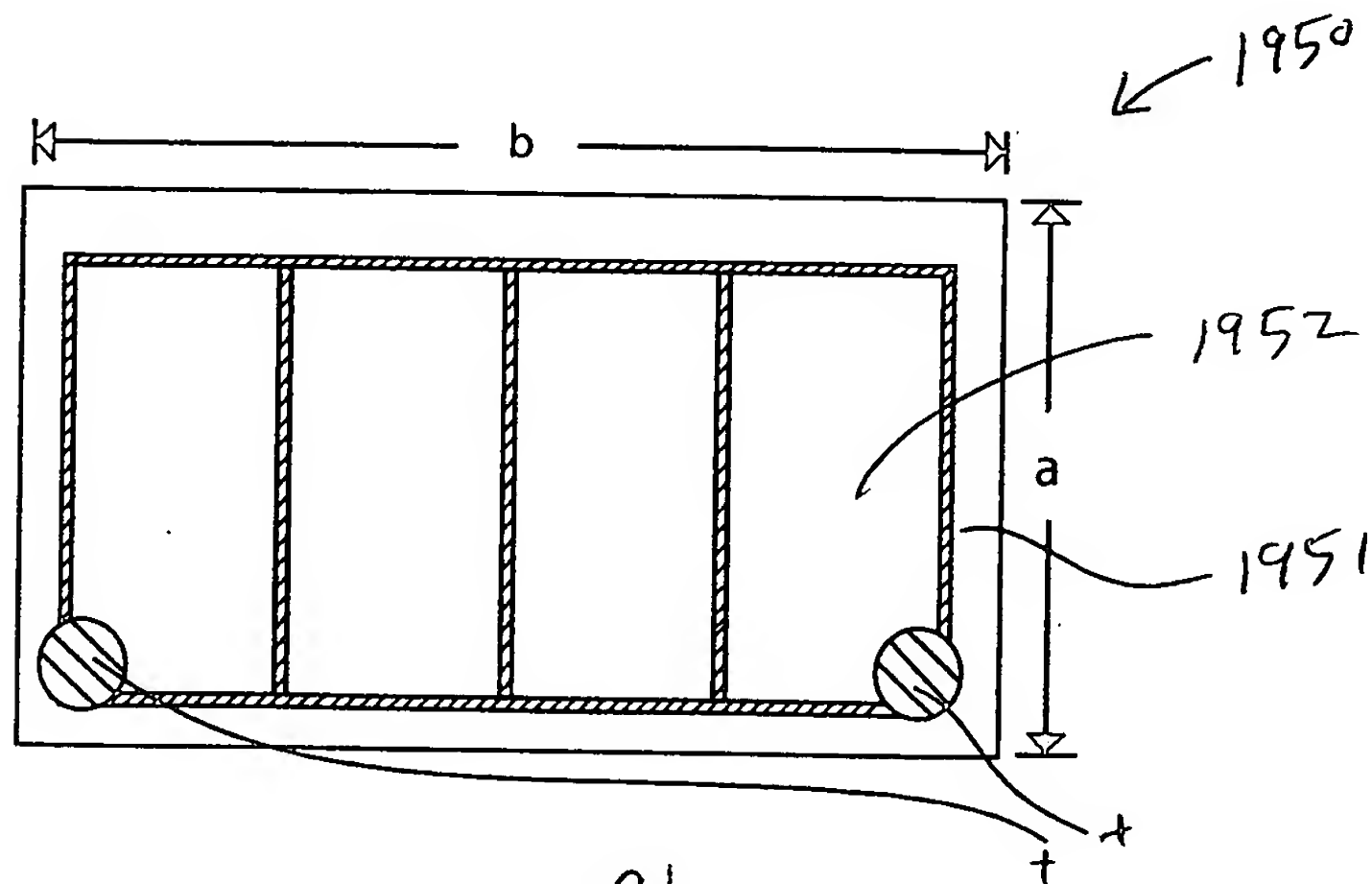


Fig. 19b

✓

FIG. 20a

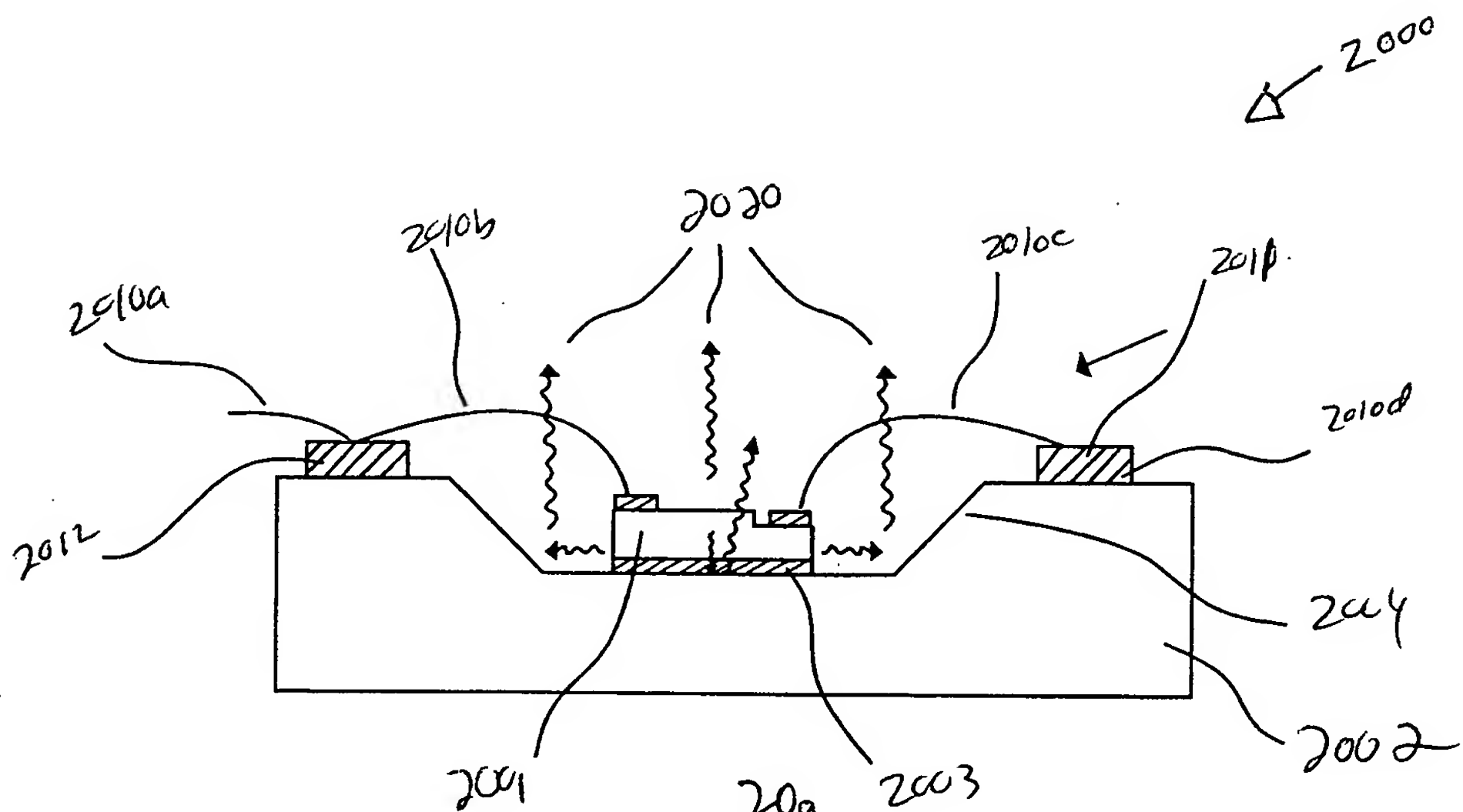


Fig. 20a

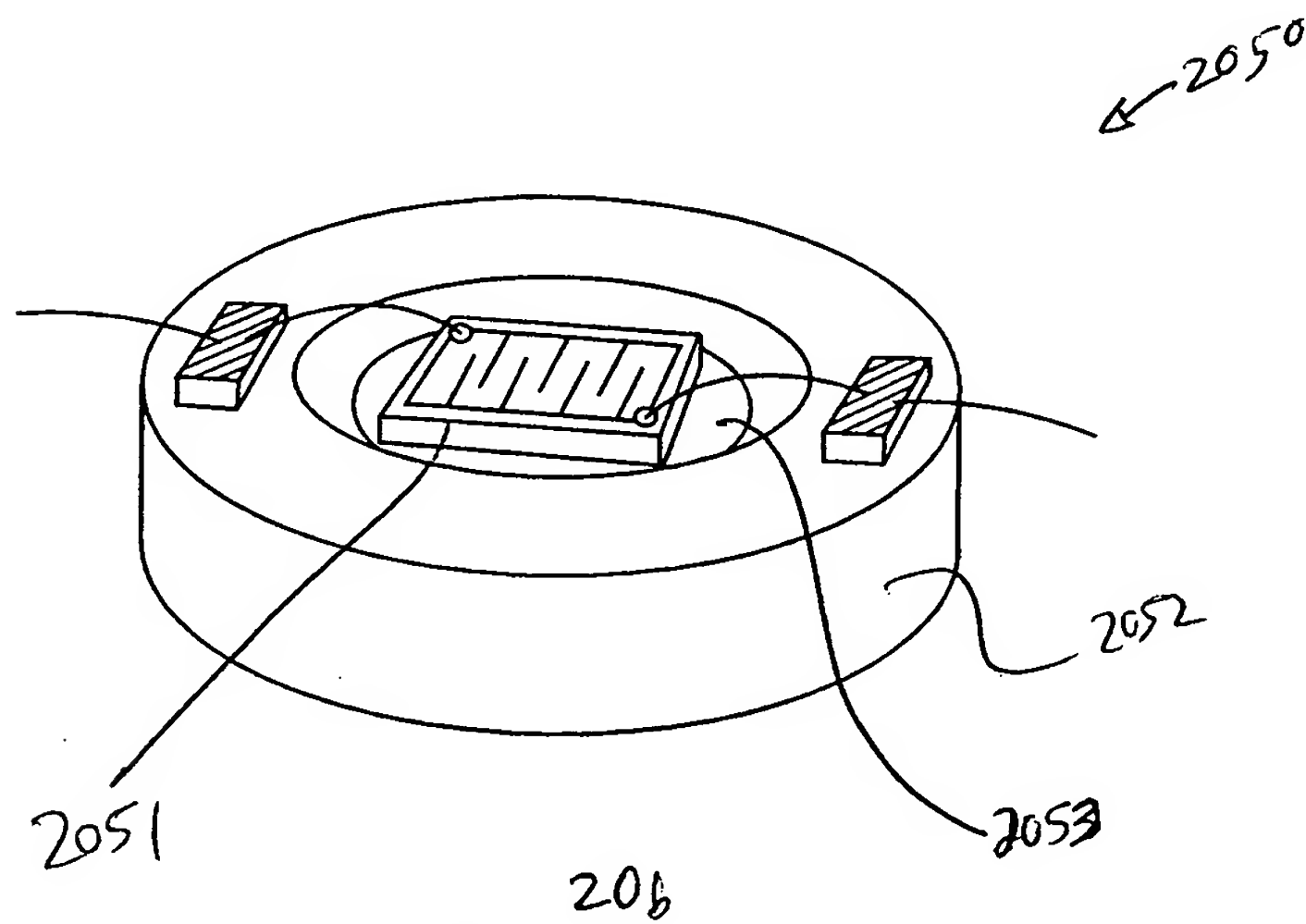


Fig. 20b

FIG. 21a

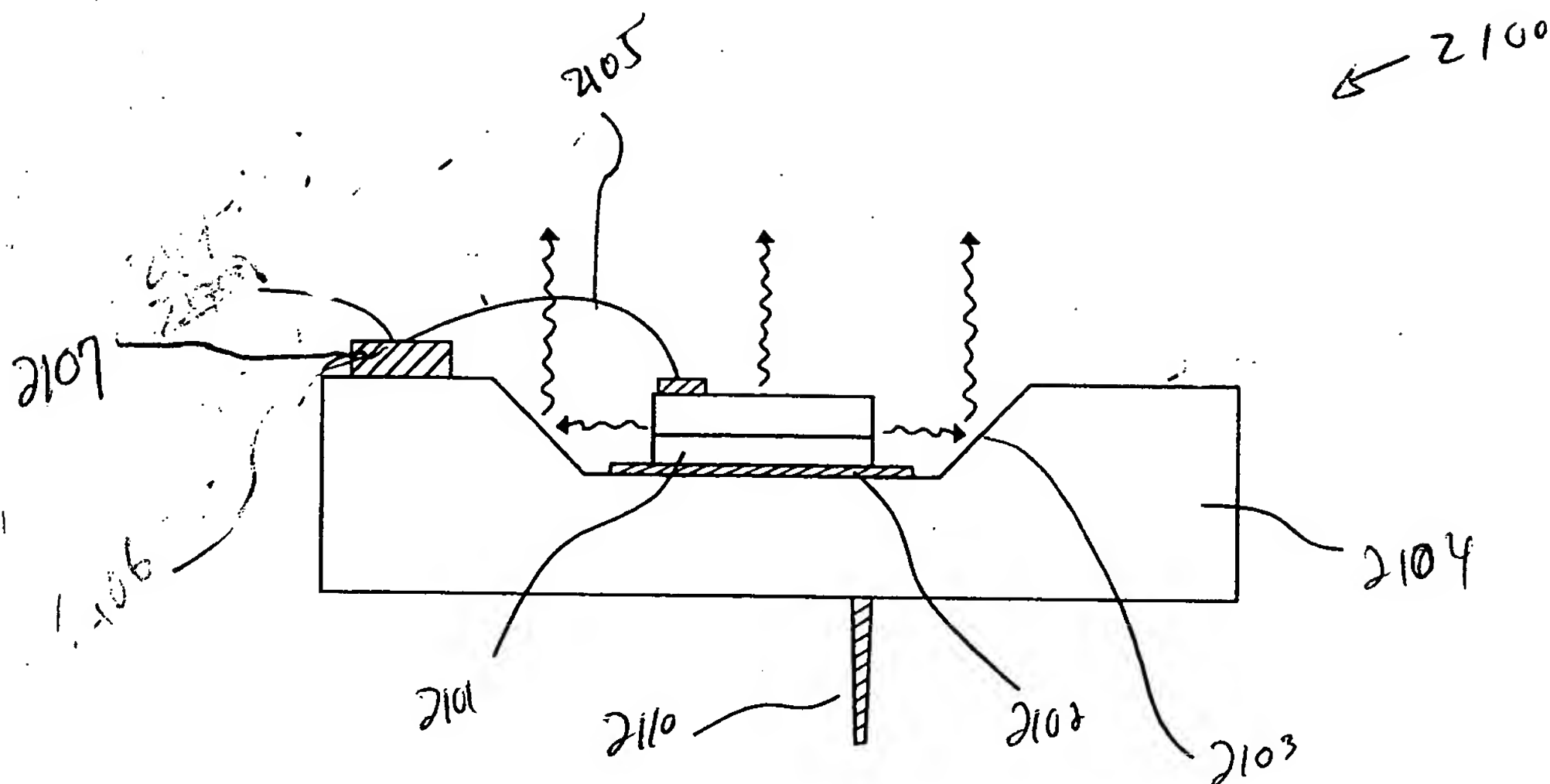


Fig. 21a

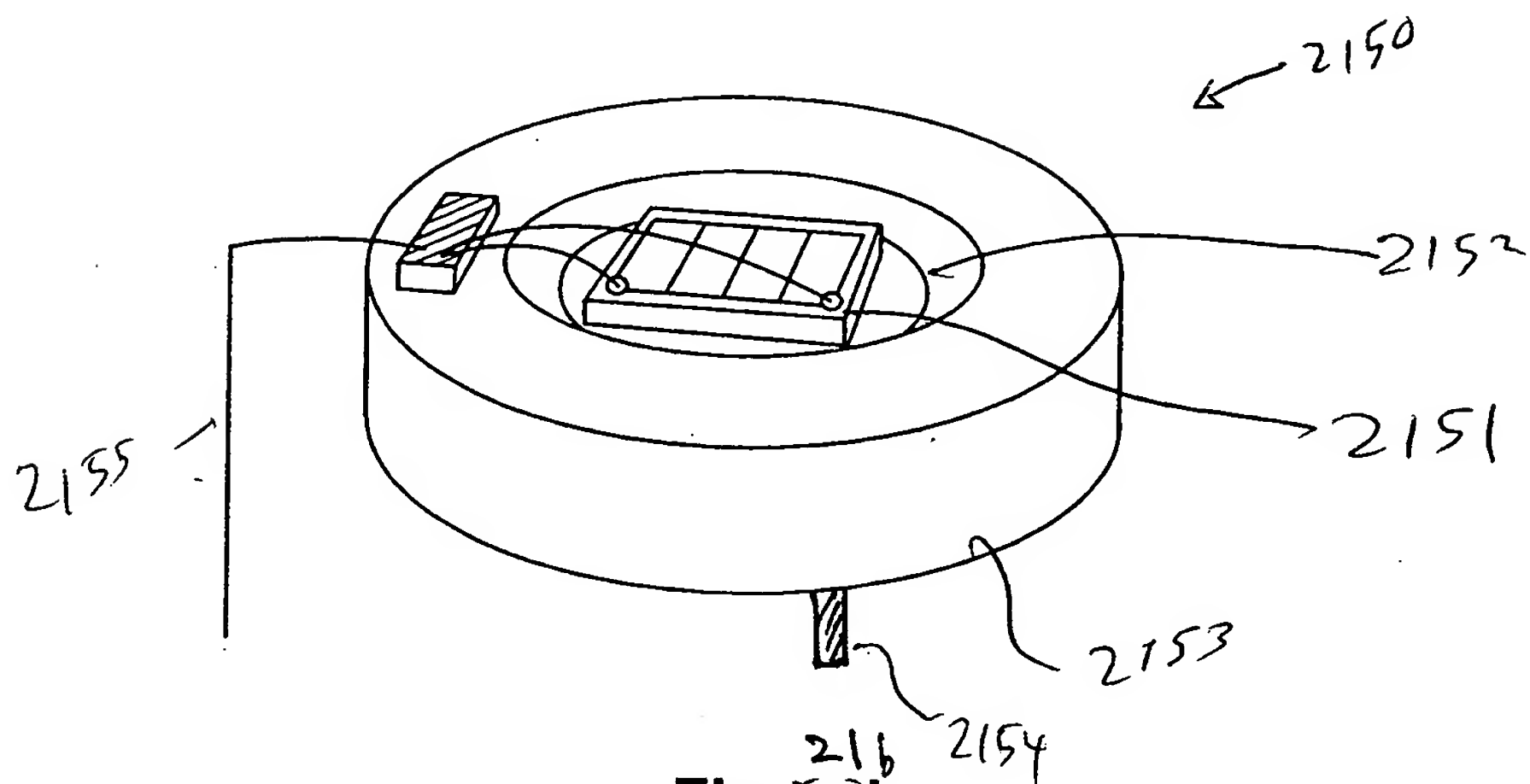


Fig. 21b

FIG. 22a, 22b, 22c

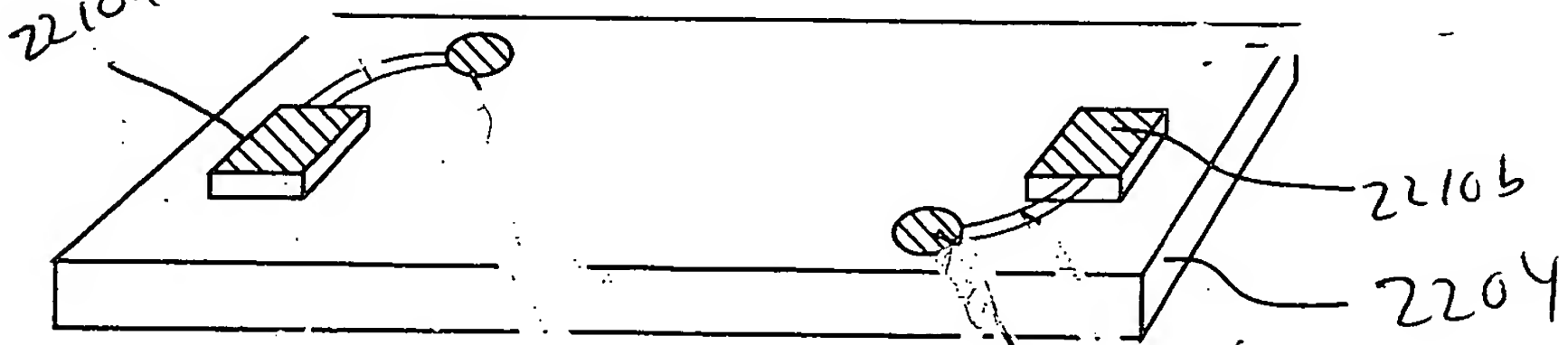
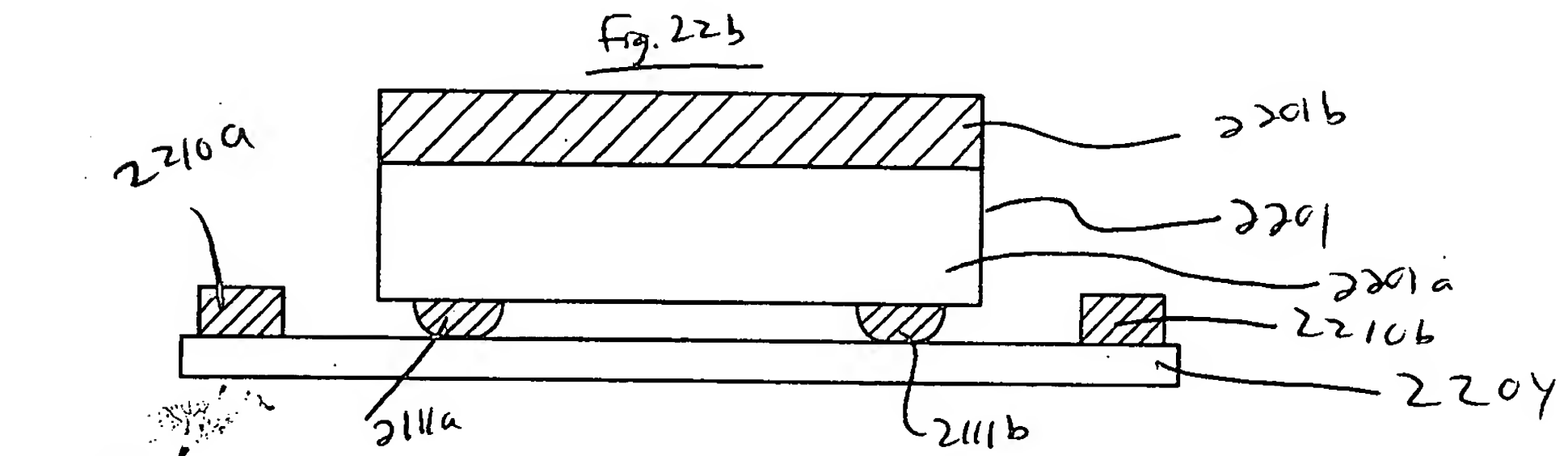
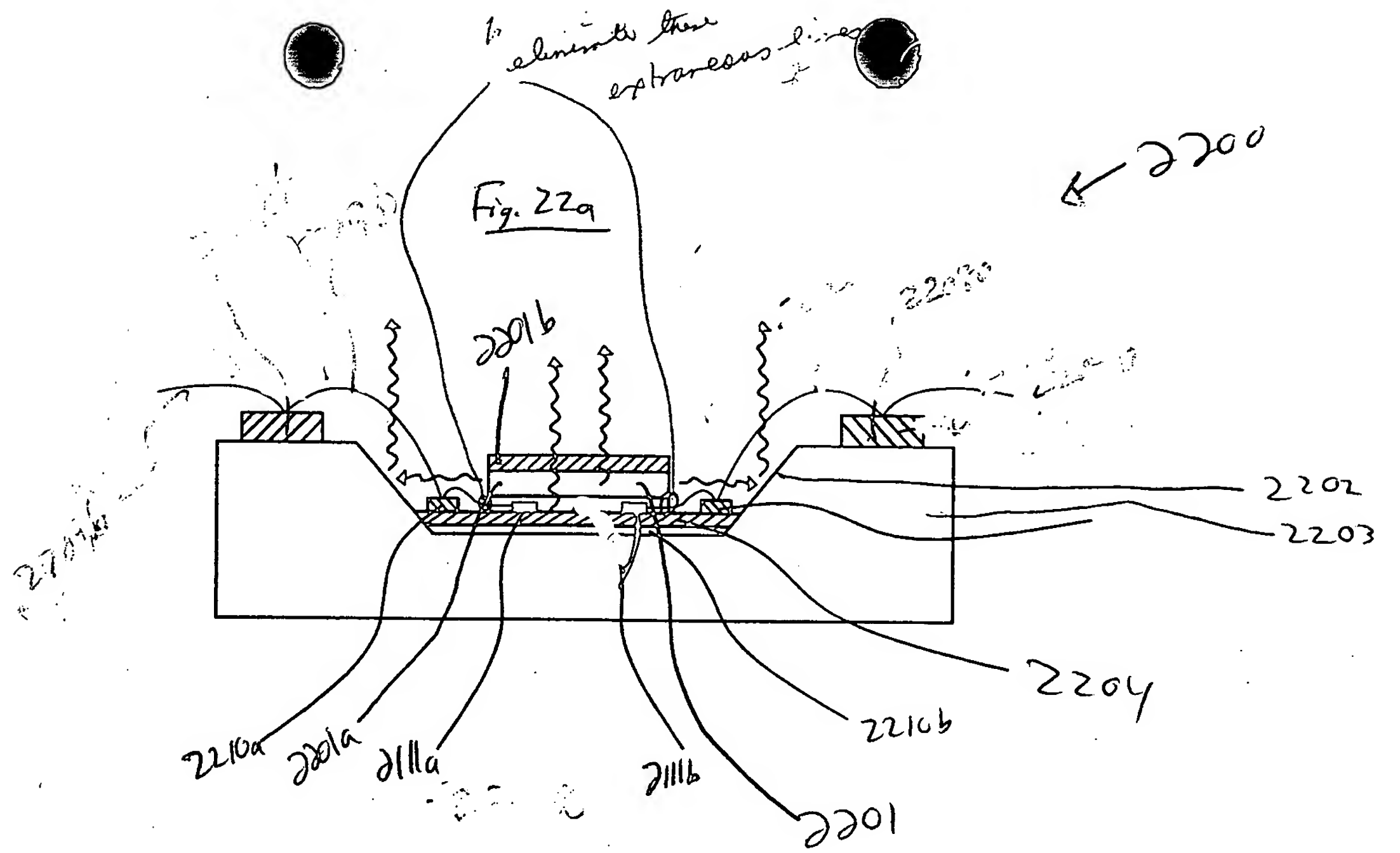


Fig. 22c

✓

FIG. 22d

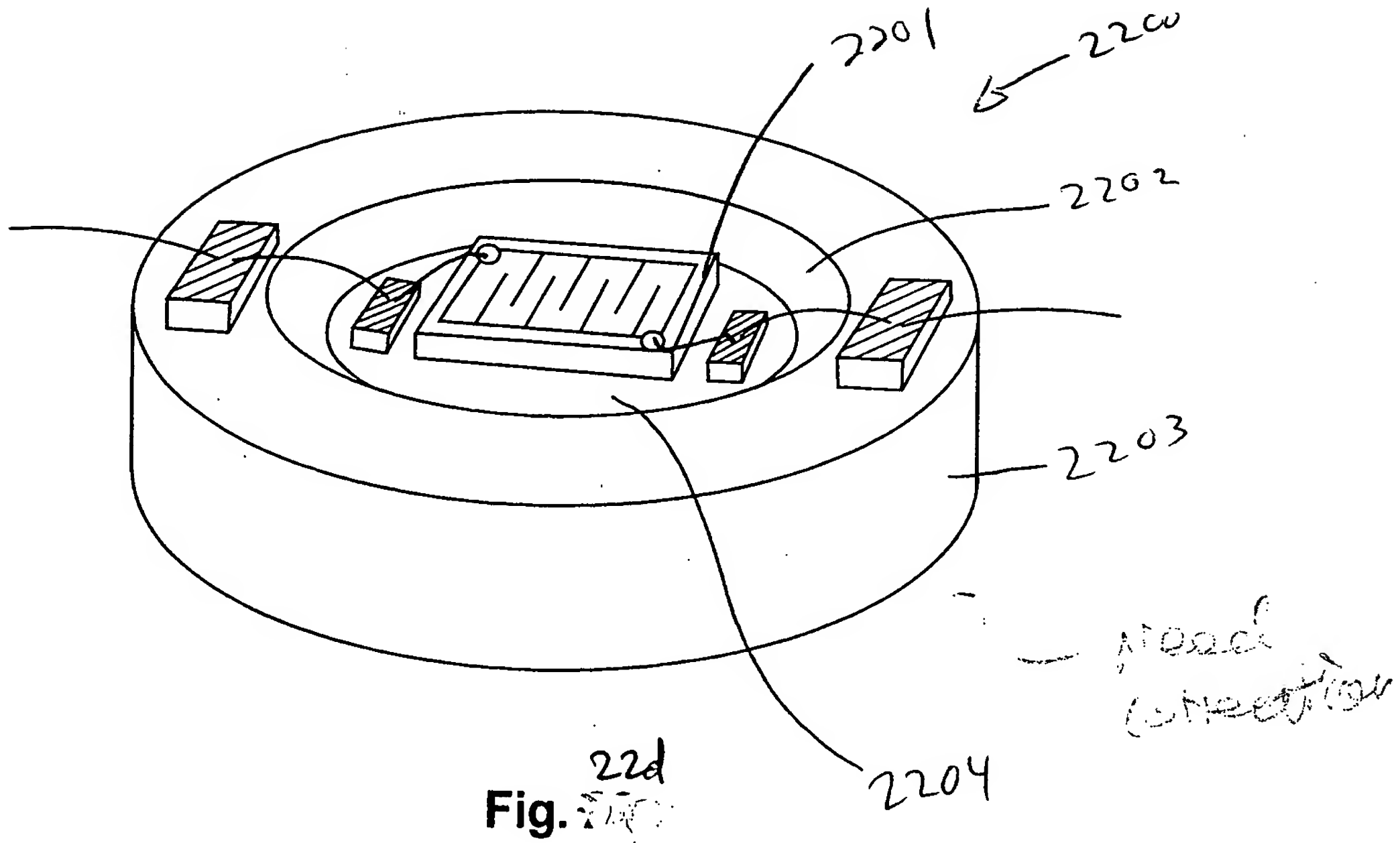
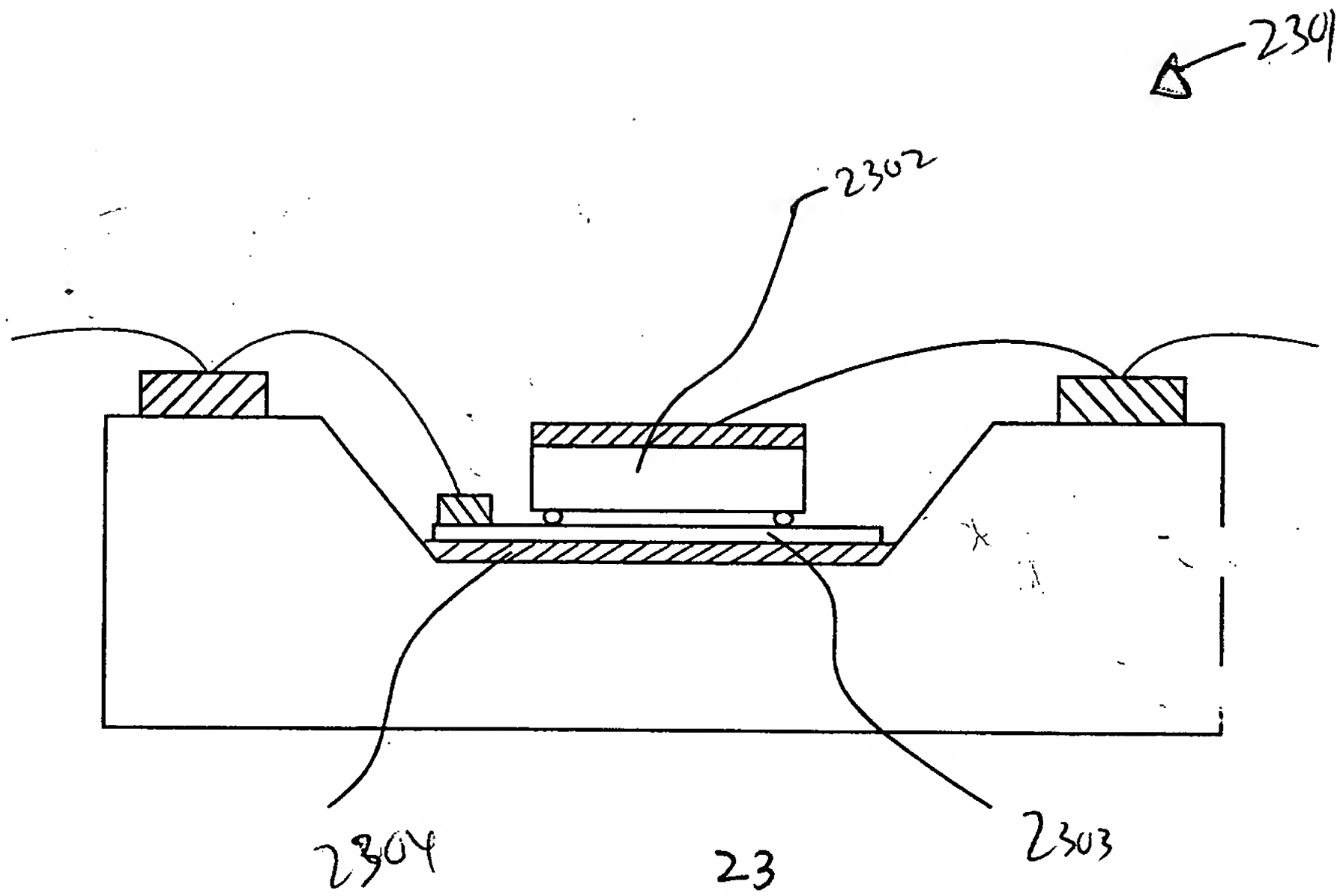


Fig. 22d

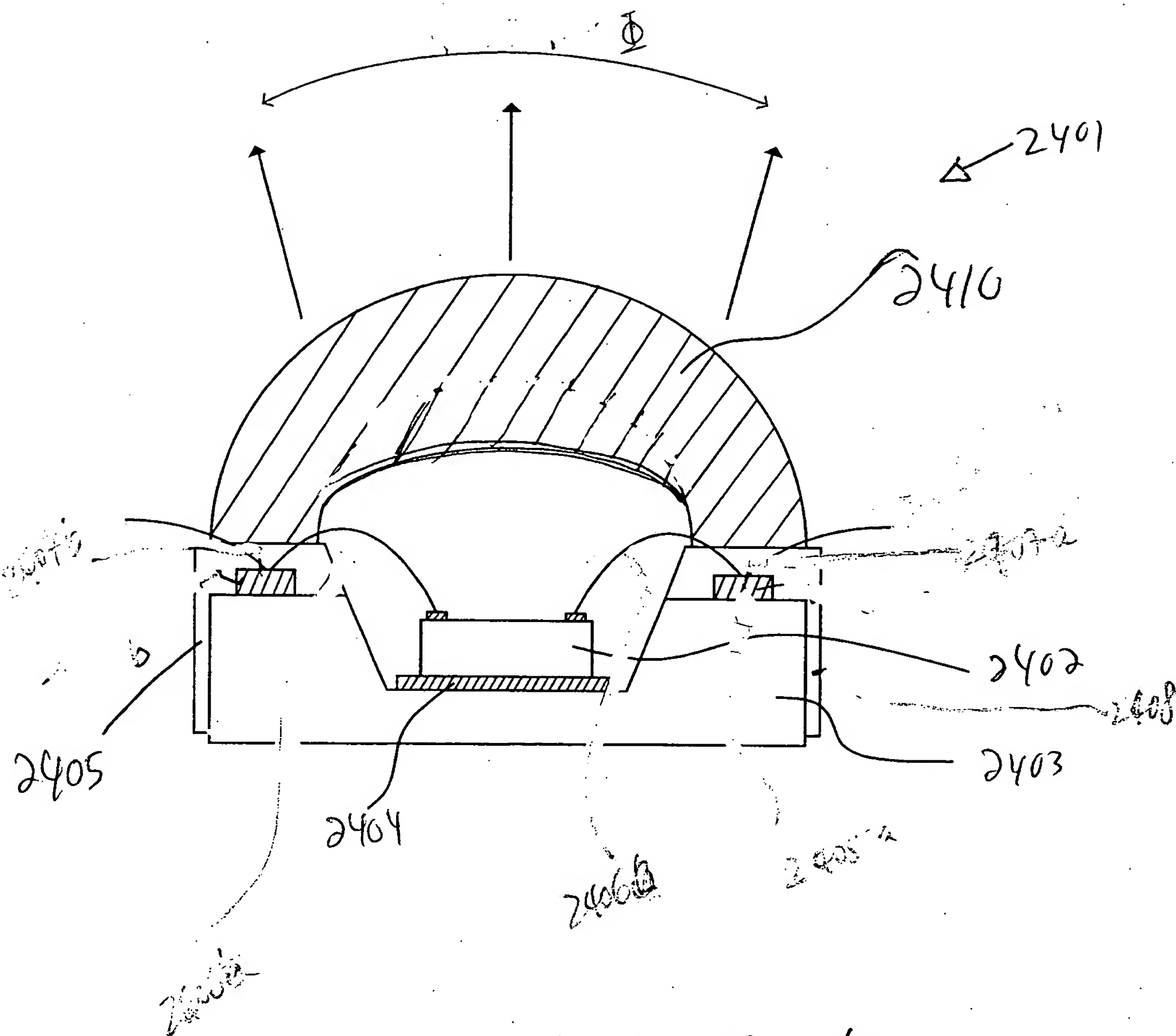
✓

FIG. 23



23  
Fig. 23

2



100-443887-100



10017454-10301

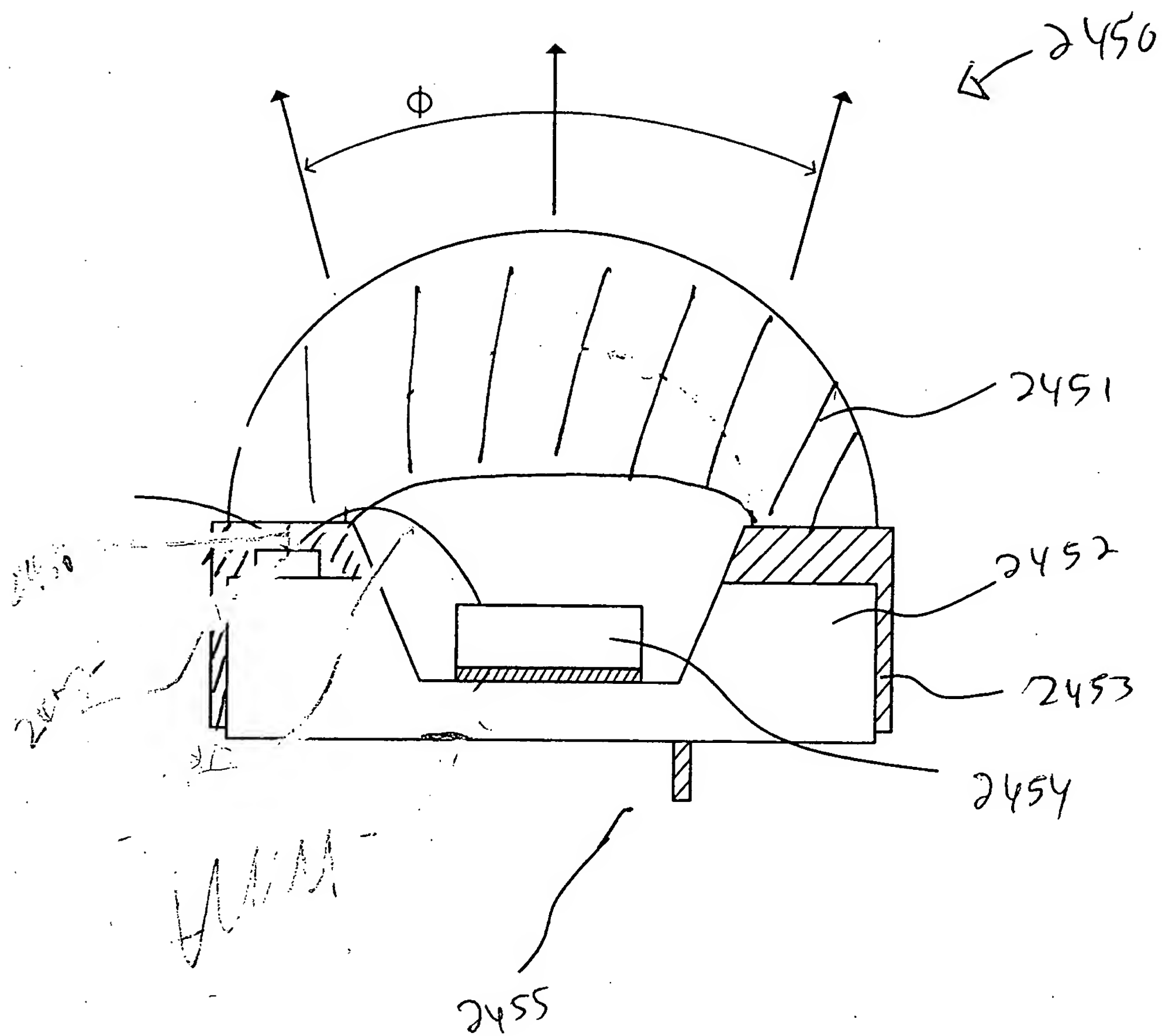


Fig. 24b

FIG. 25A

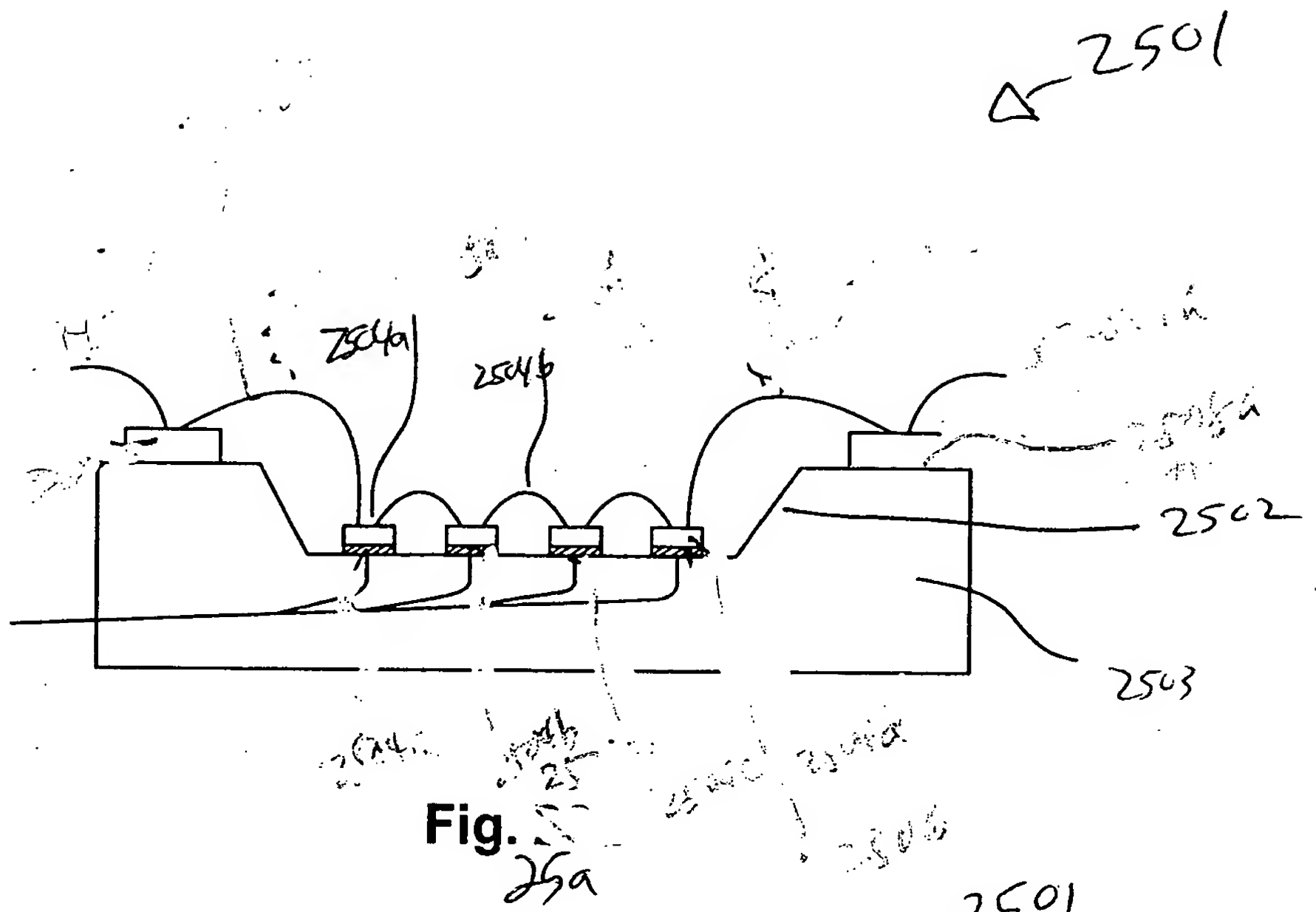


Fig. 25a

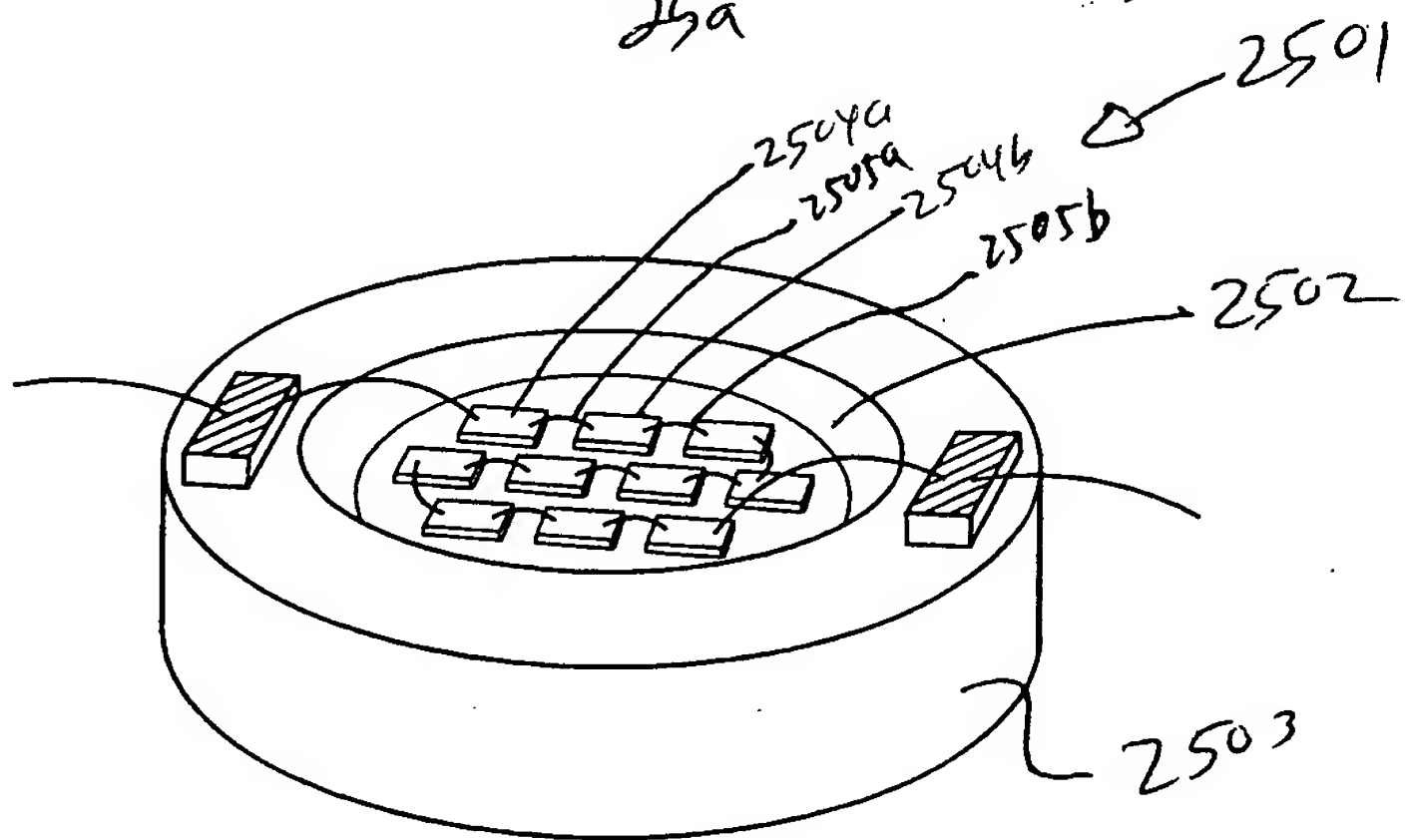


Fig. 25b

TOP VIEW - 45427807

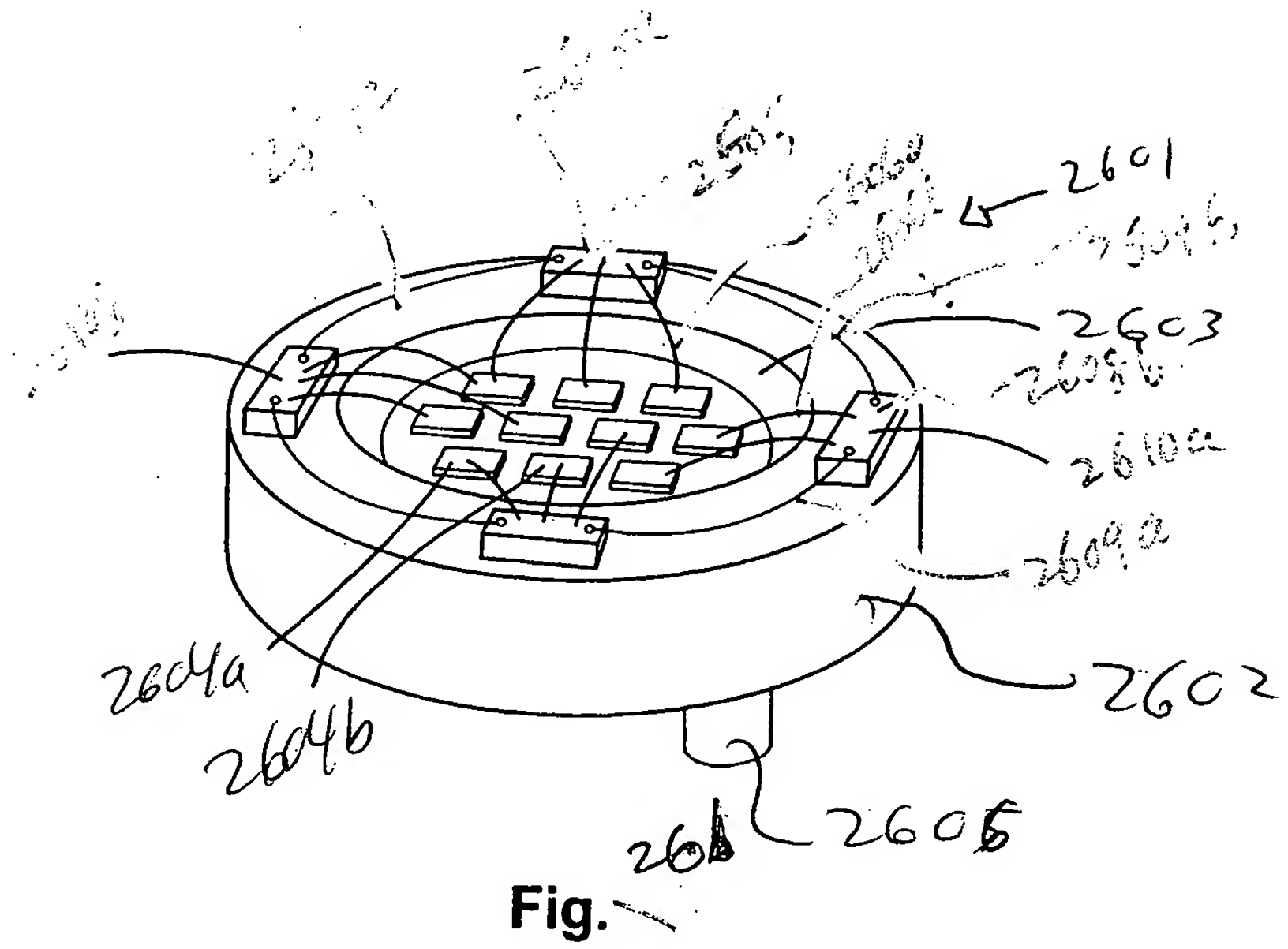
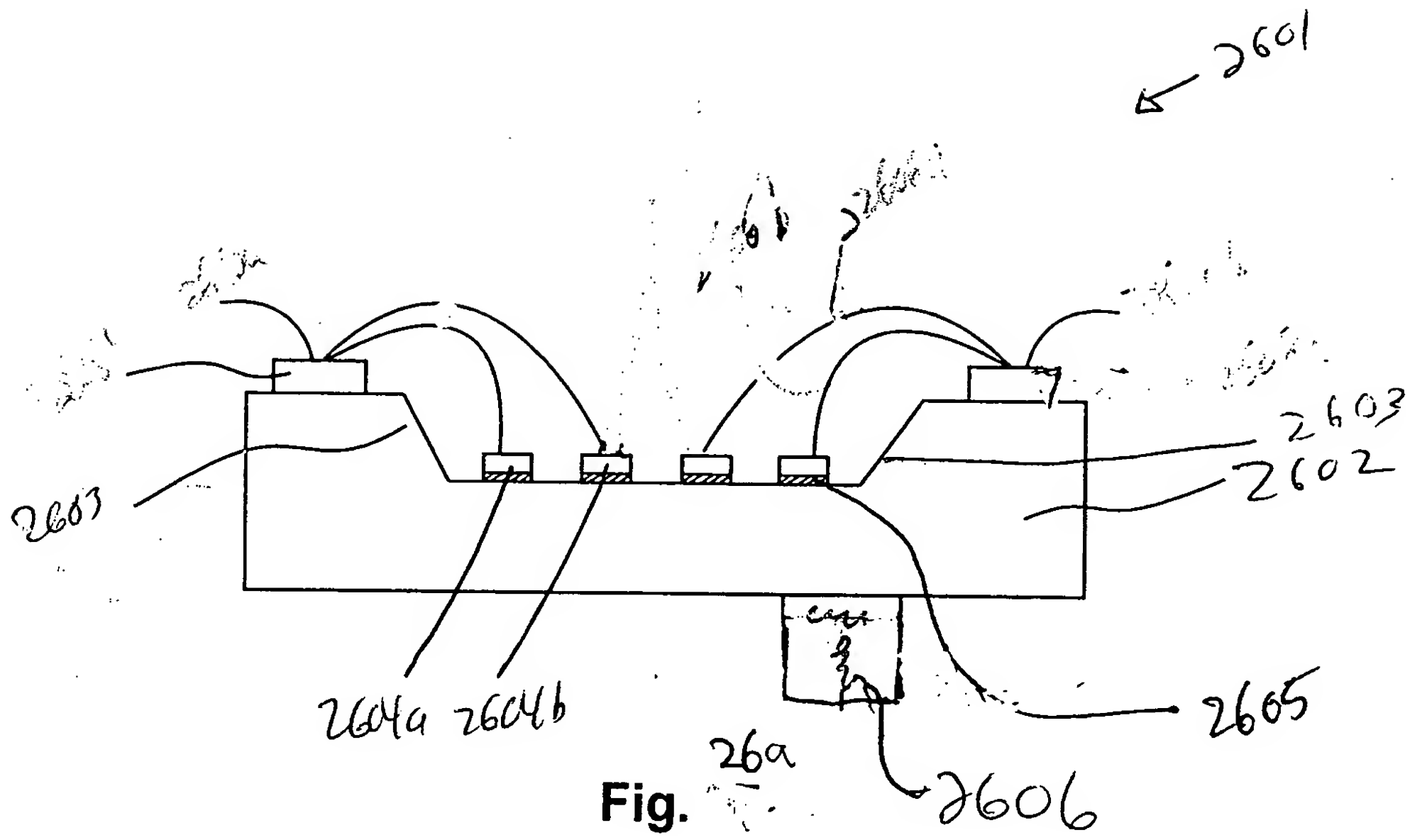


FIG. 2701

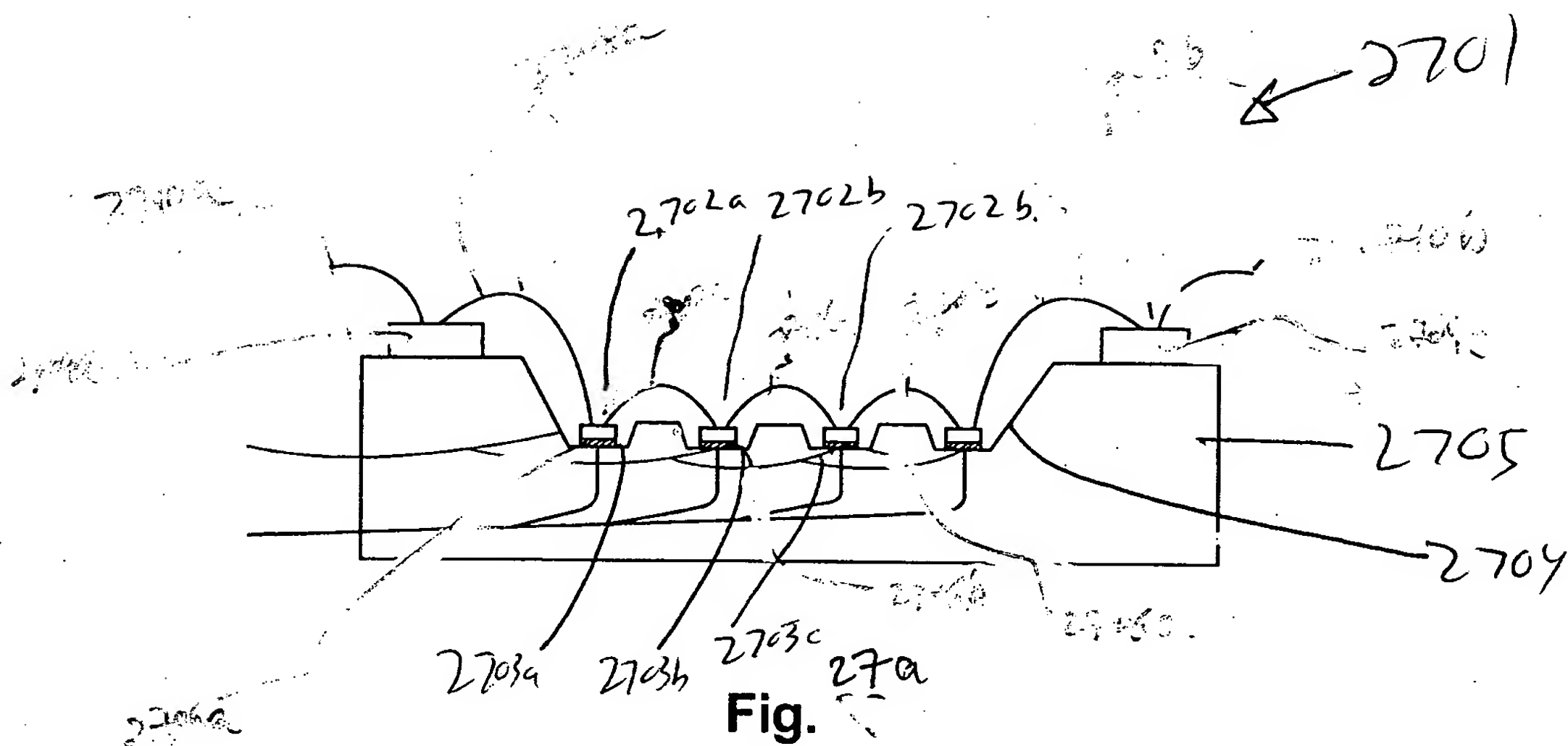


Fig.

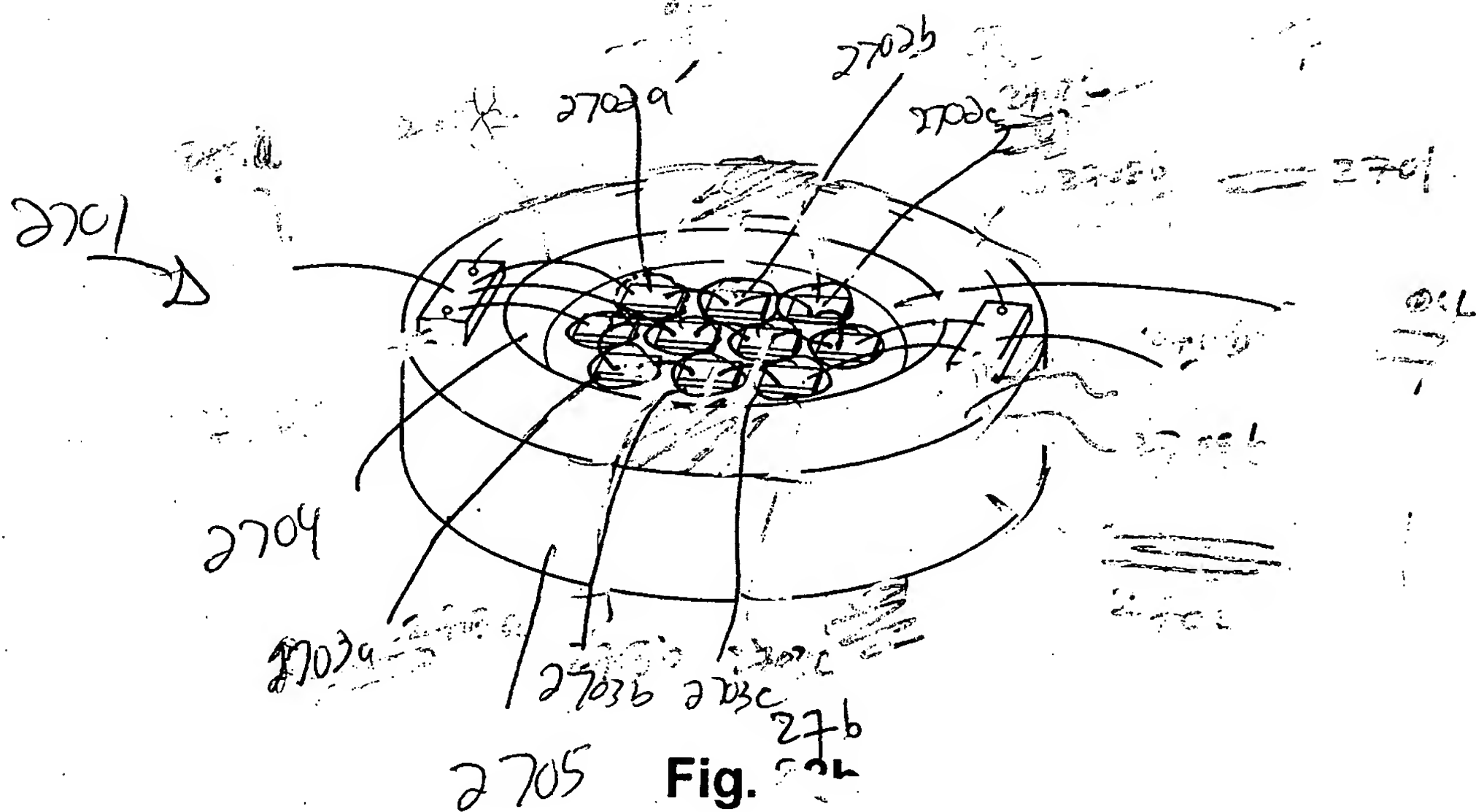
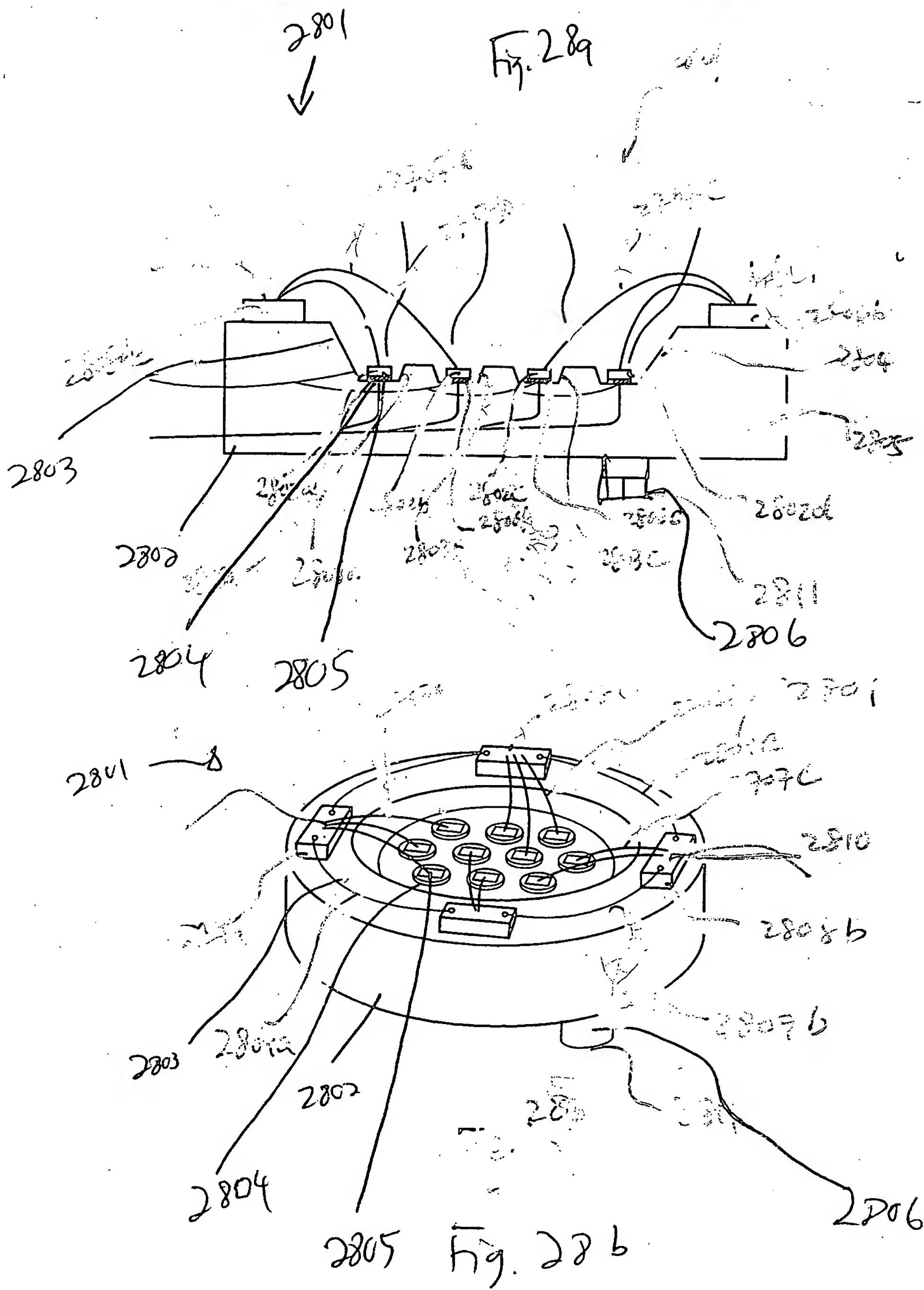


Fig.

FIG. 28a



FOOT-HEAT-FOOT

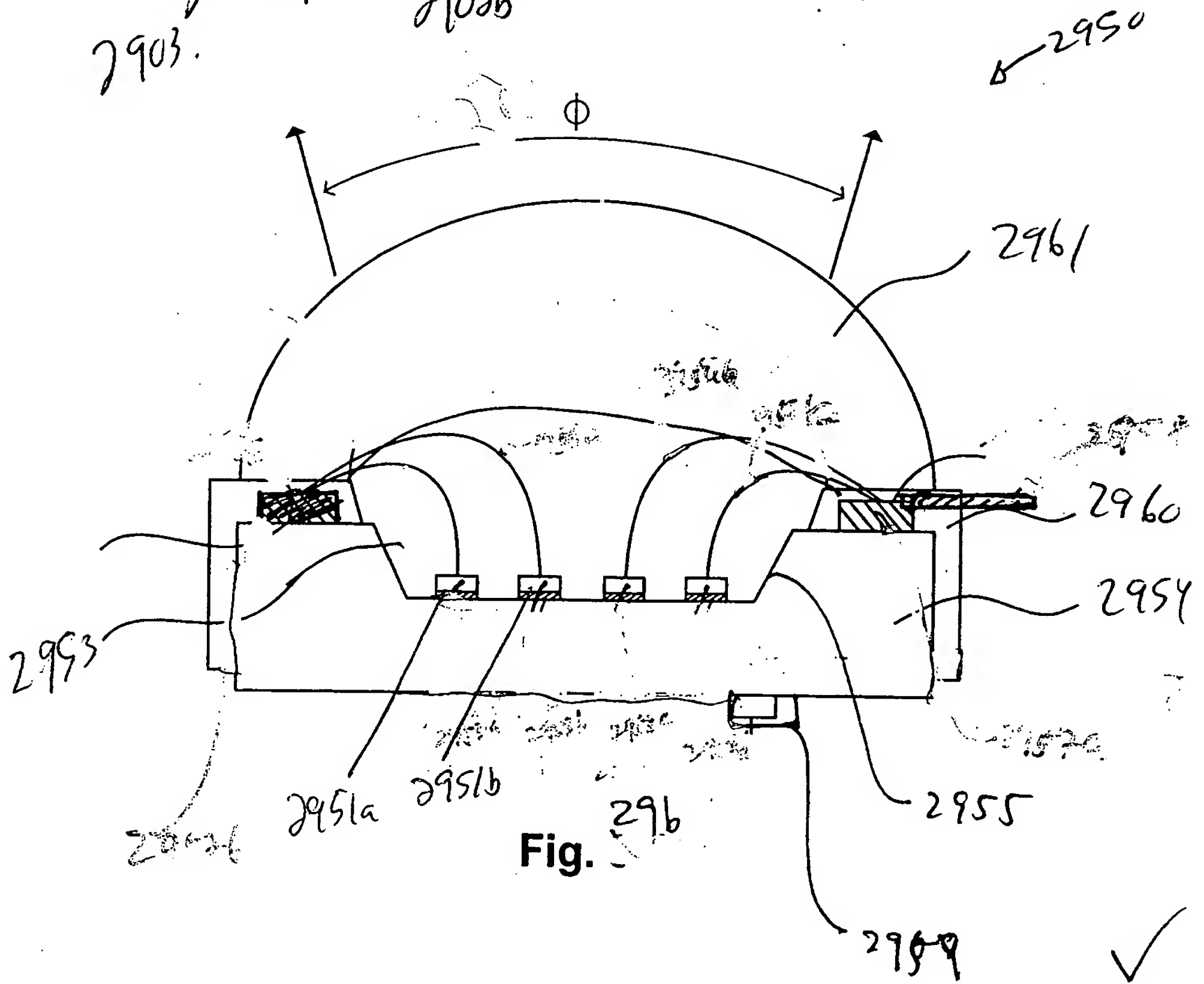
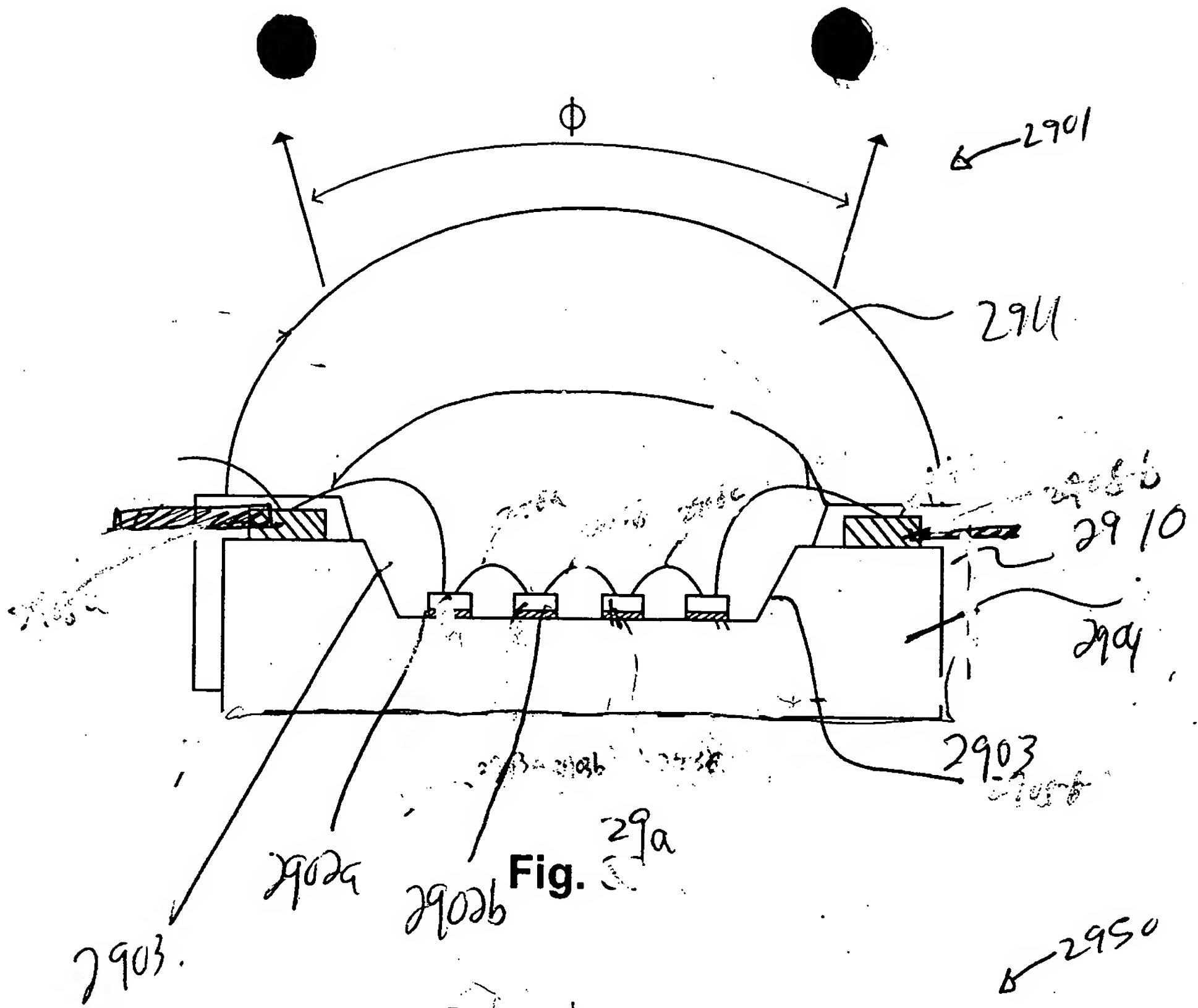


FIG. 30a

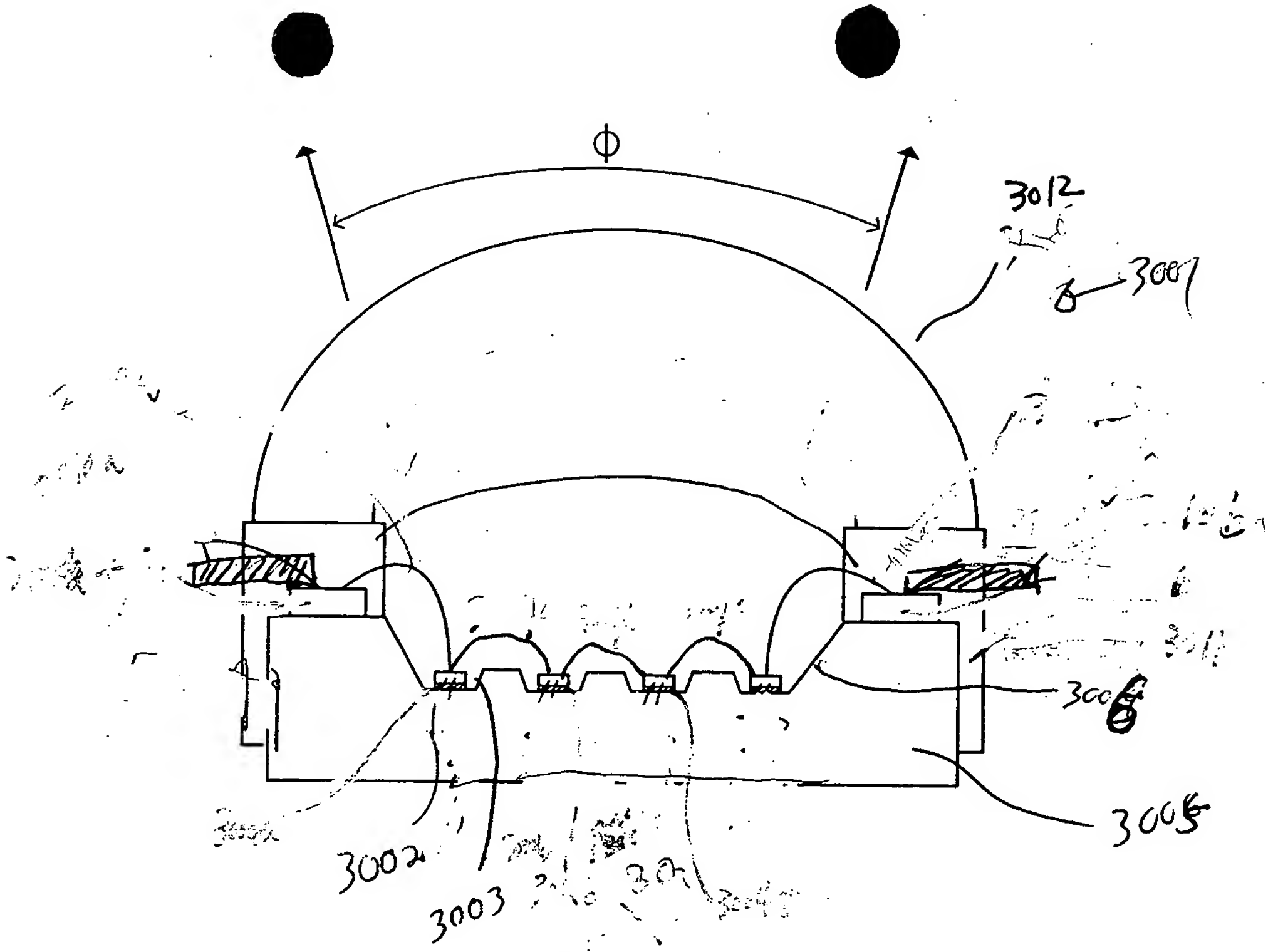


Fig 30a

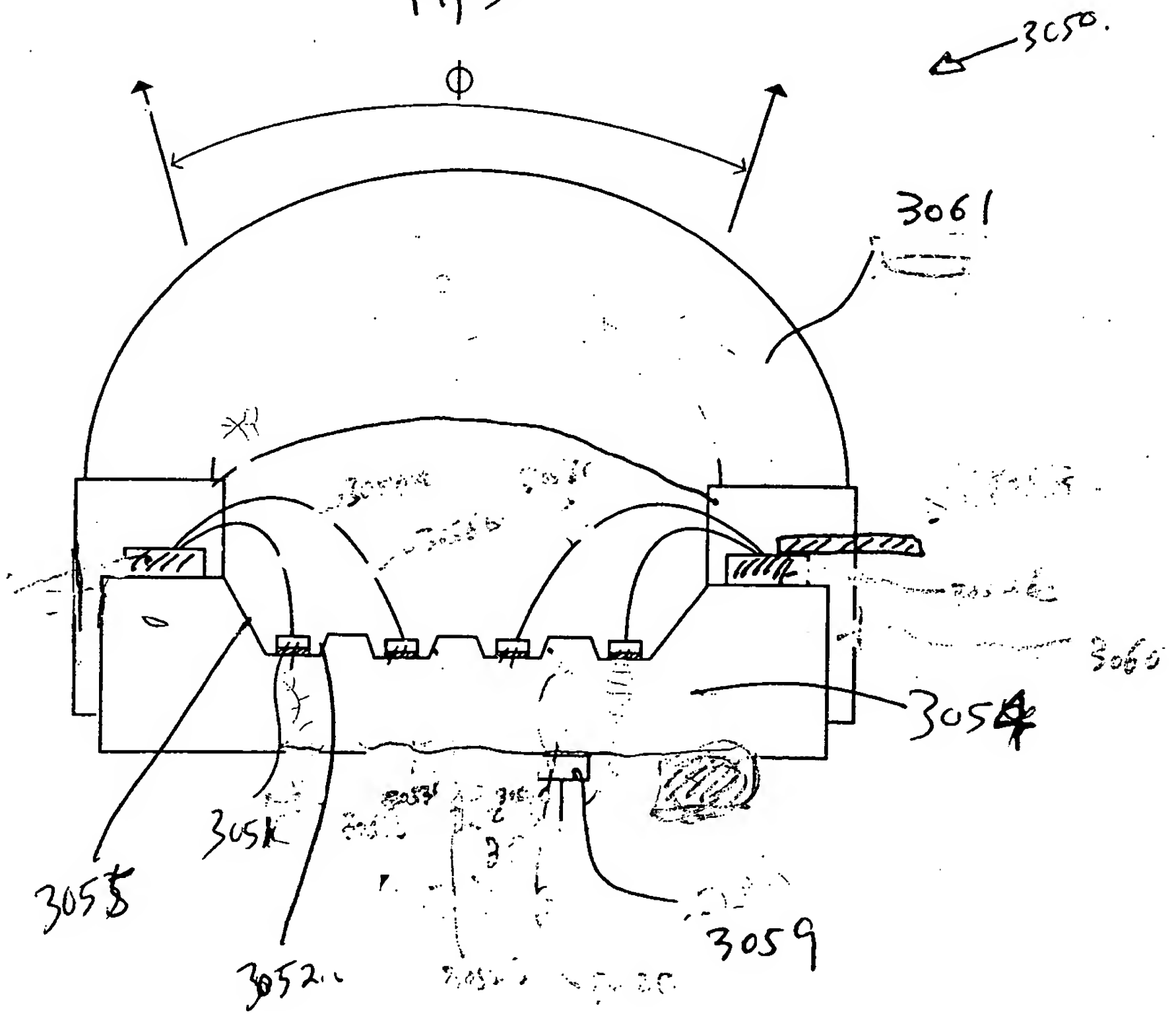


Fig 30b

✓

10037454-13304

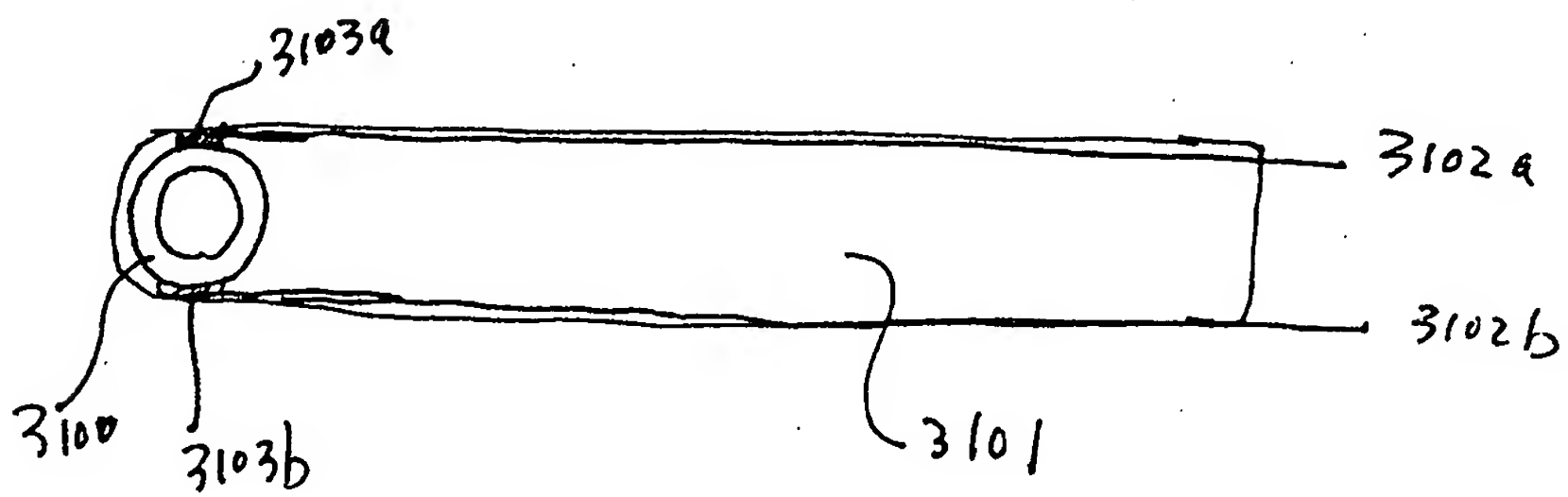
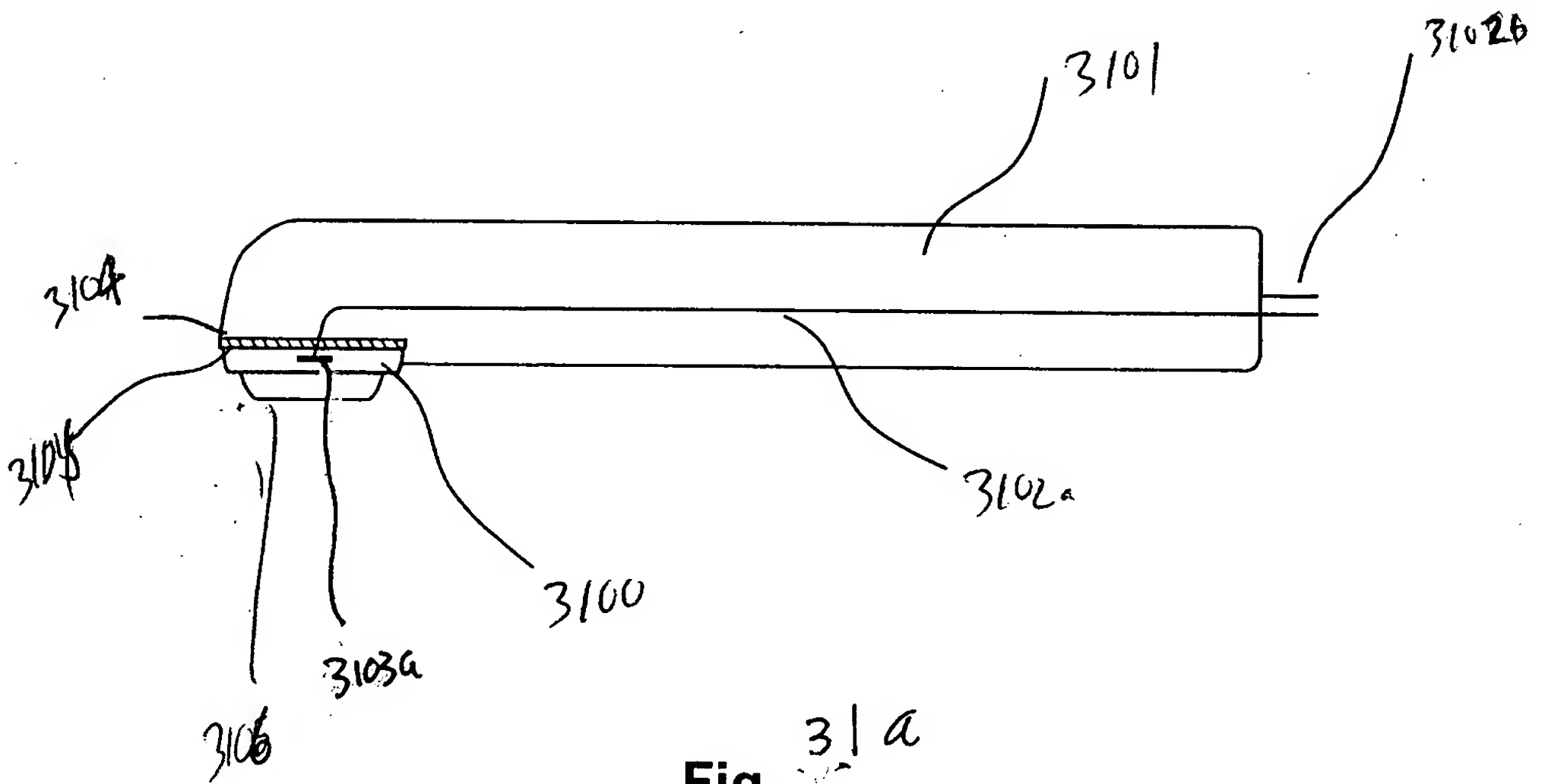




Fig. 320a

Fig 3

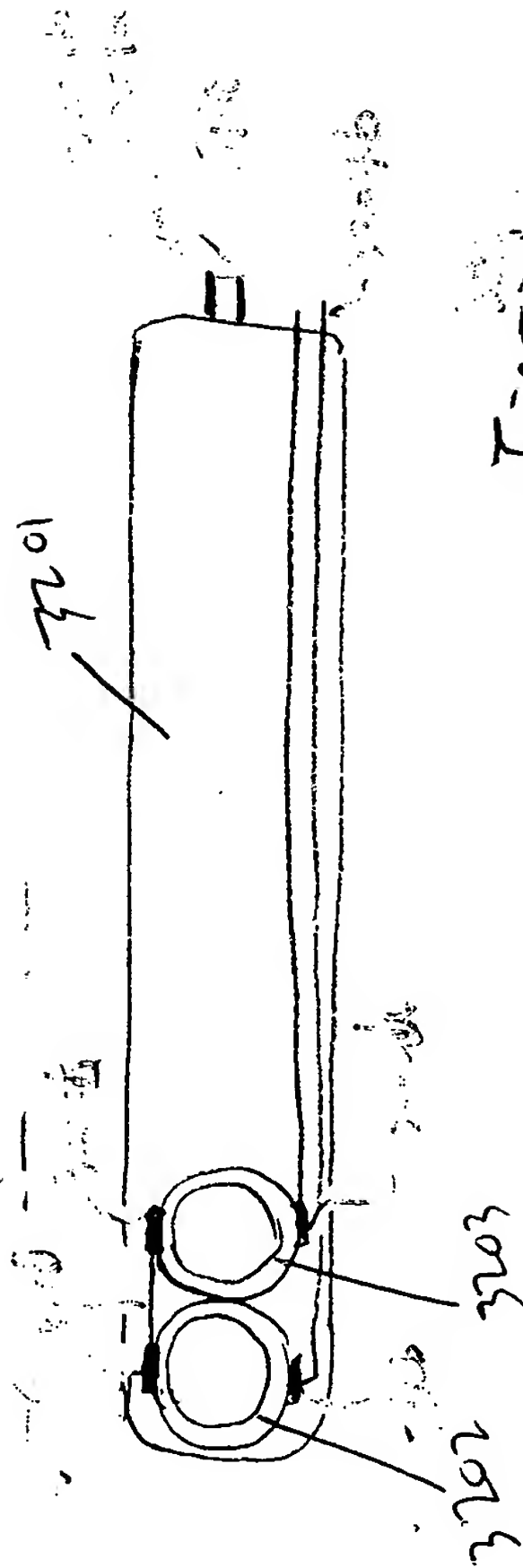


Fig 32b

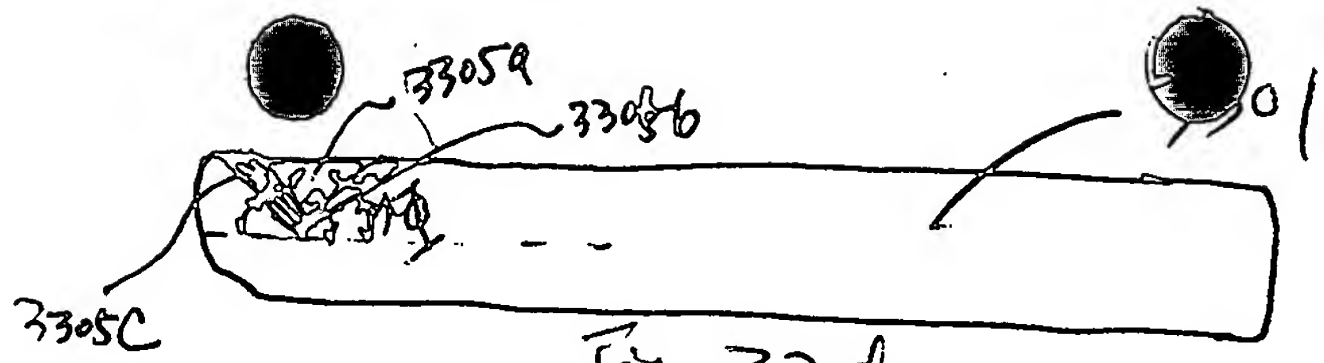


Fig. 33d

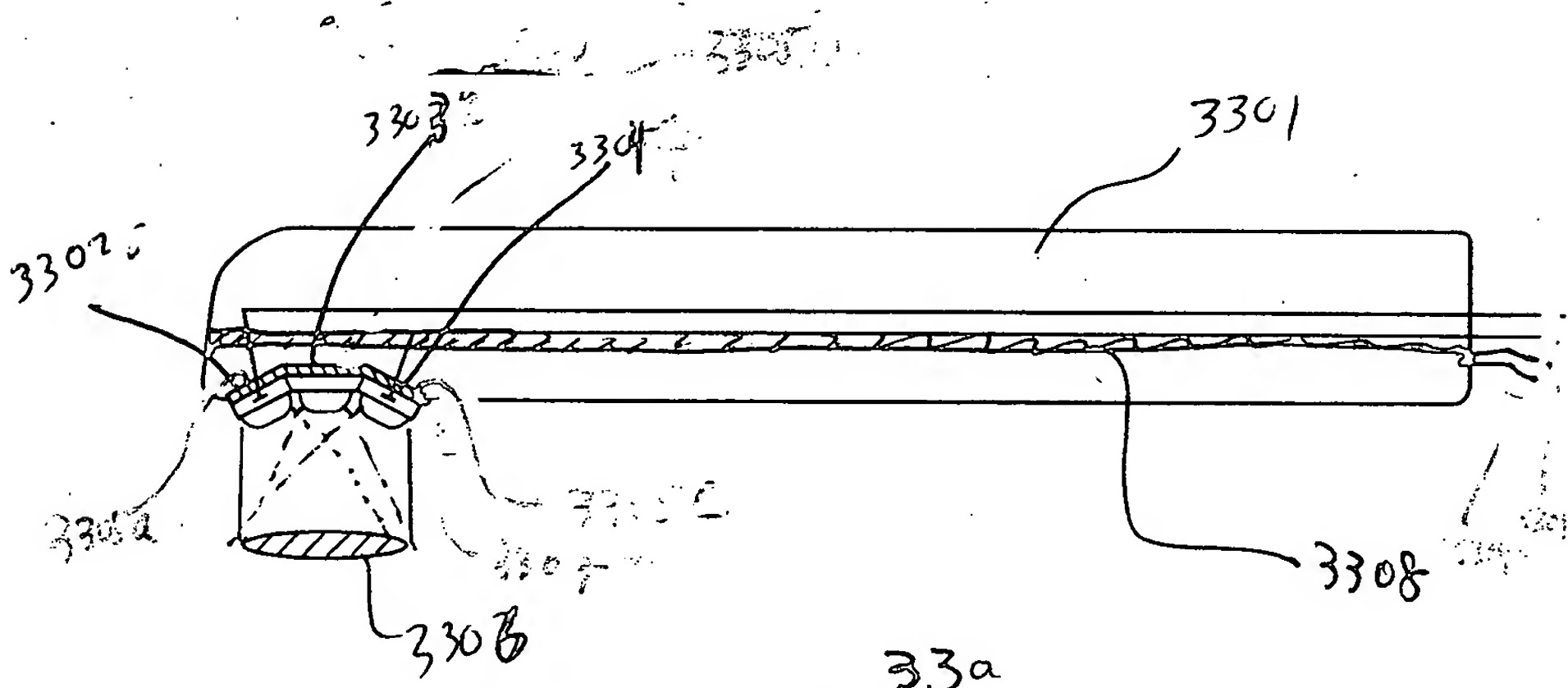


Fig. 33a

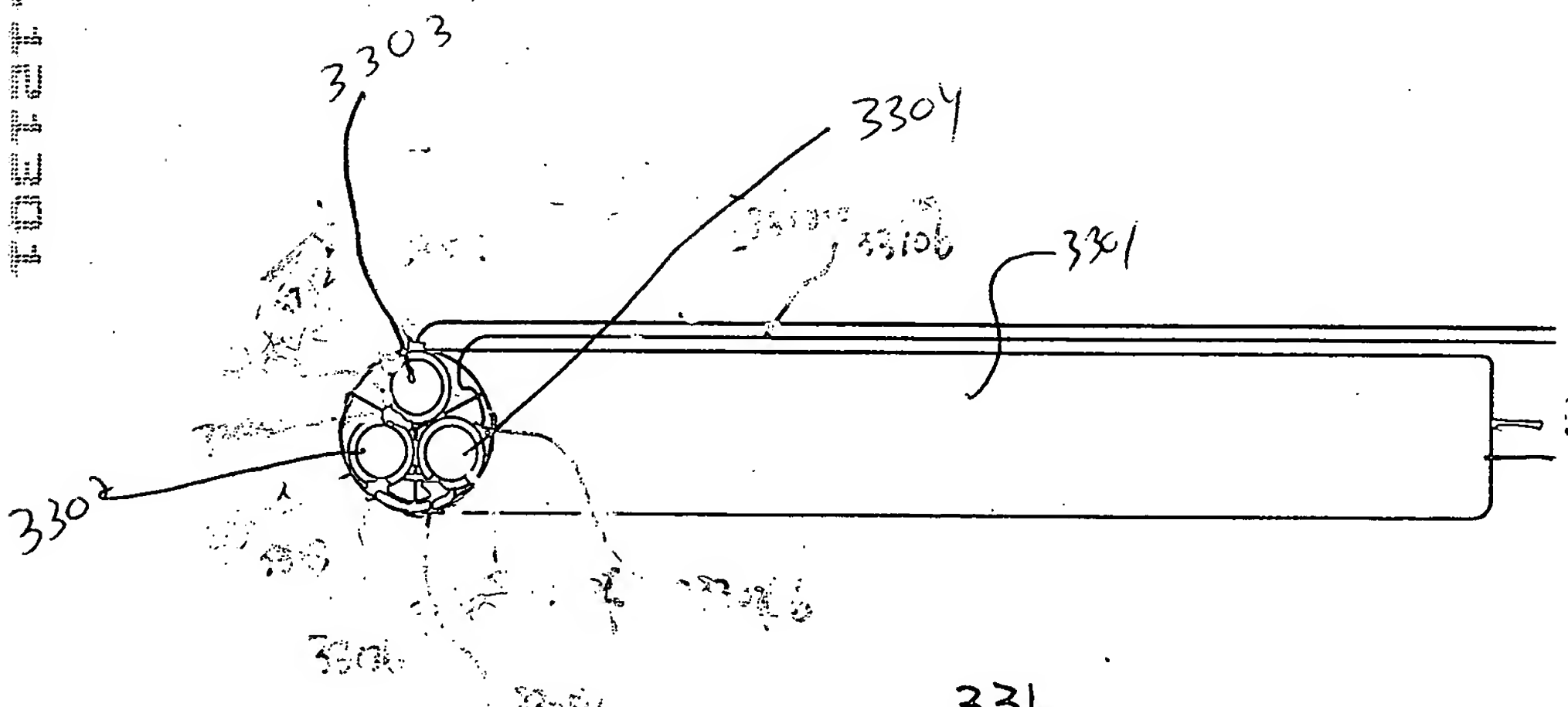


Fig. 33b

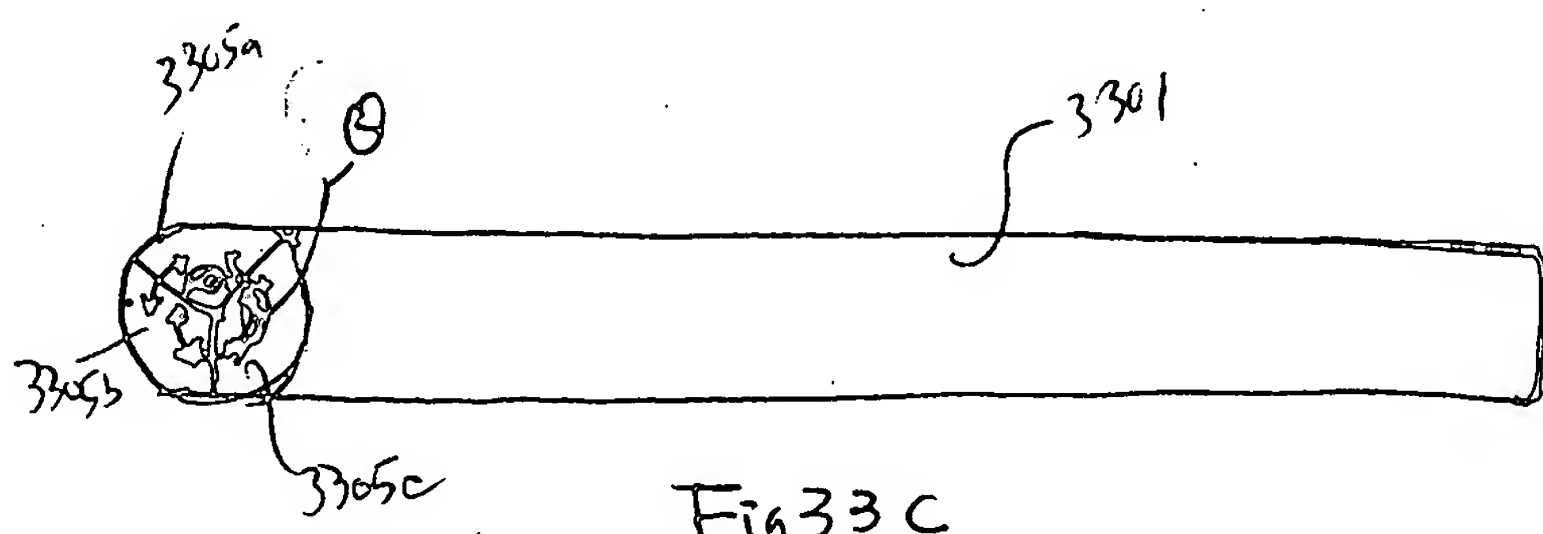


Fig. 33c

FIG. 34A

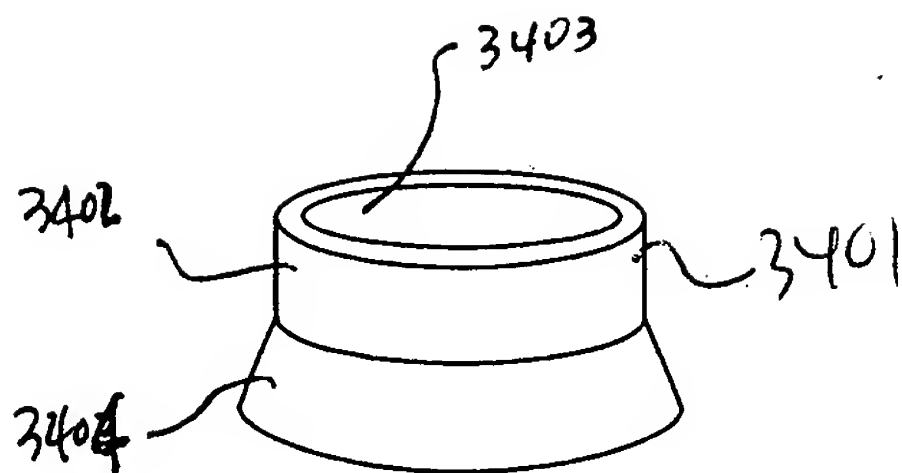


Fig. 34a

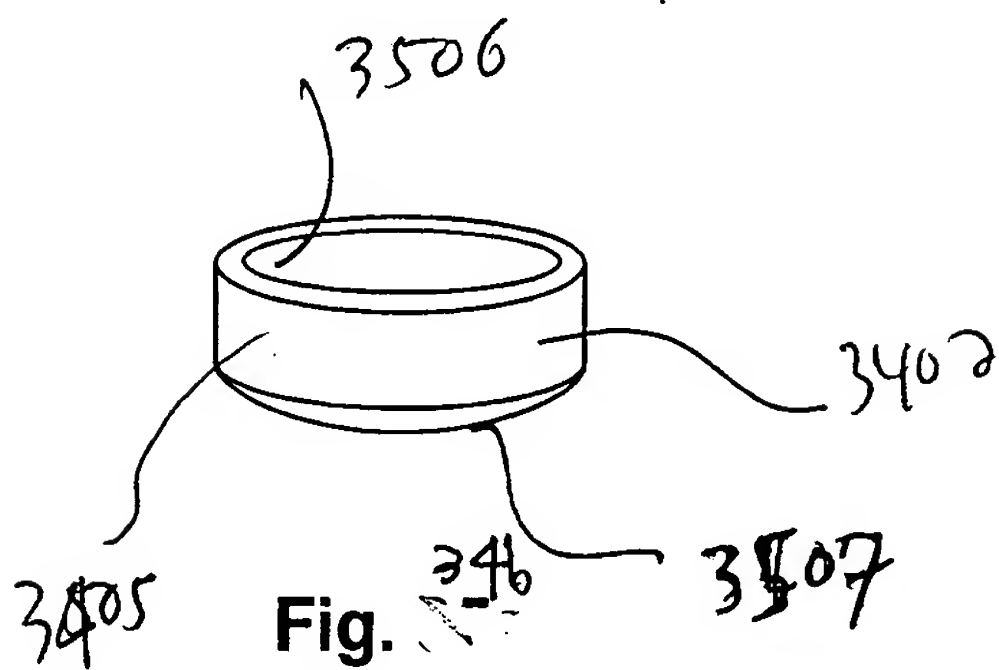


Fig. 34b

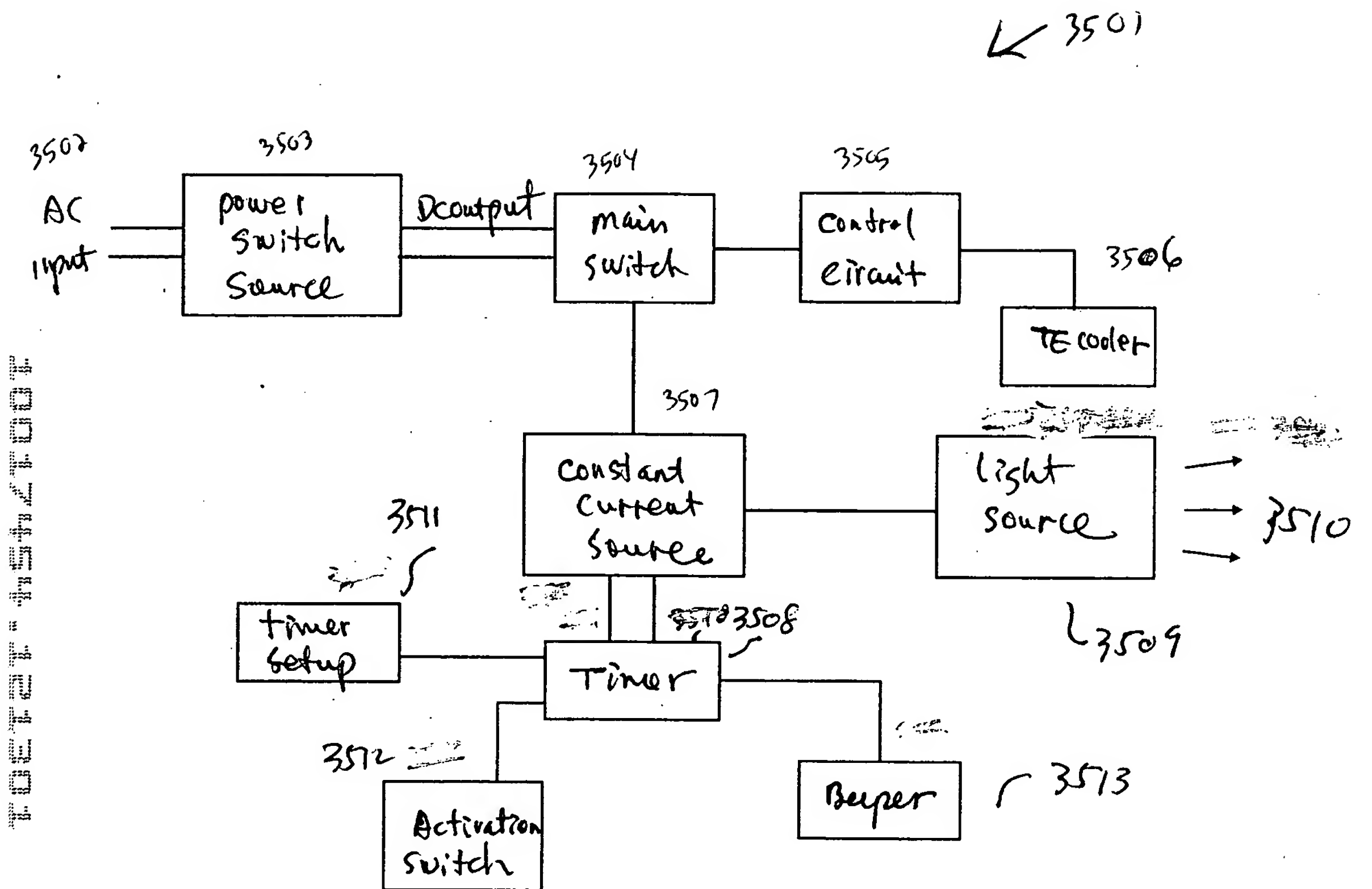
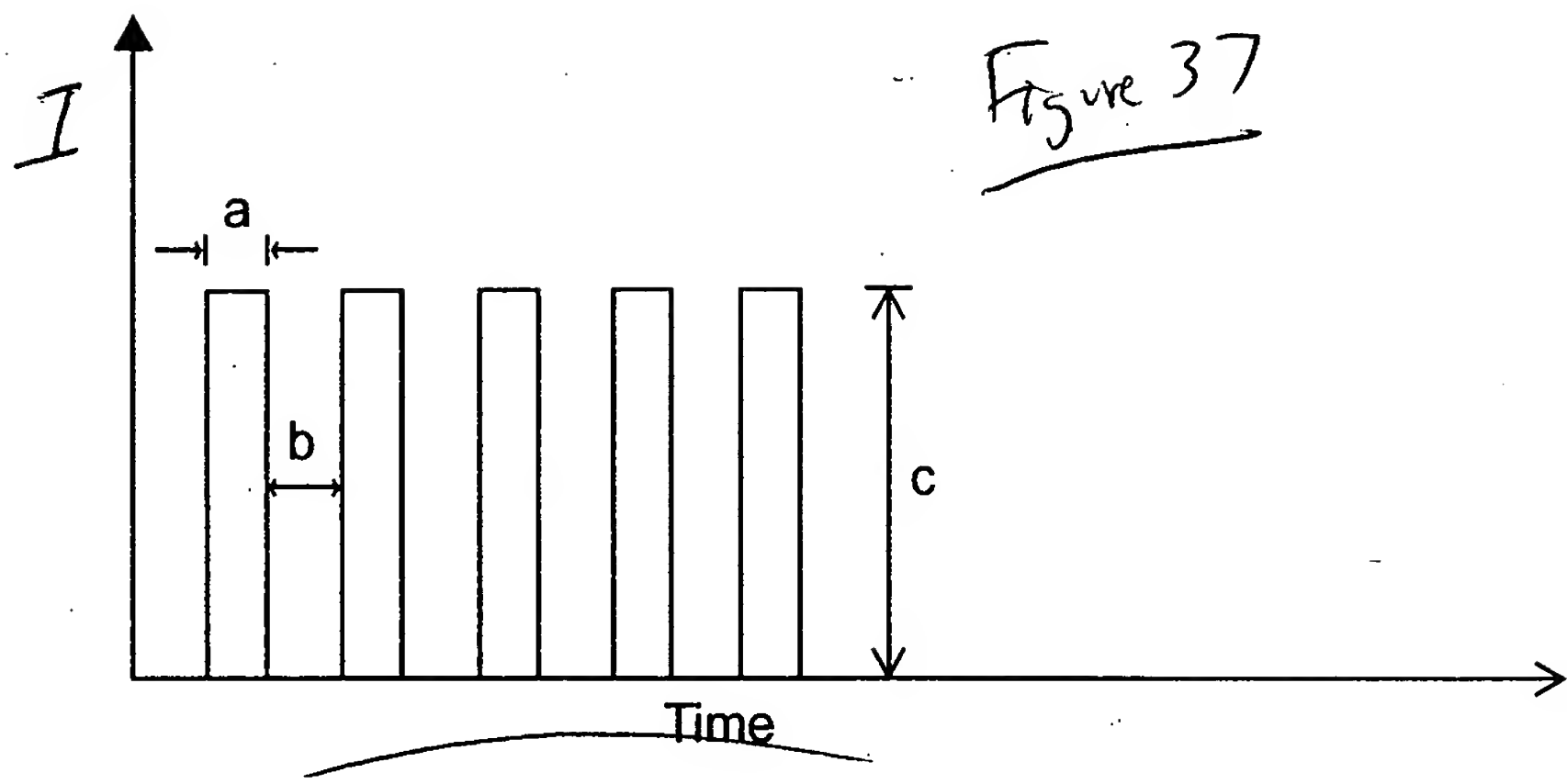


Fig. 35



10047454-4304



FOOT-154200T

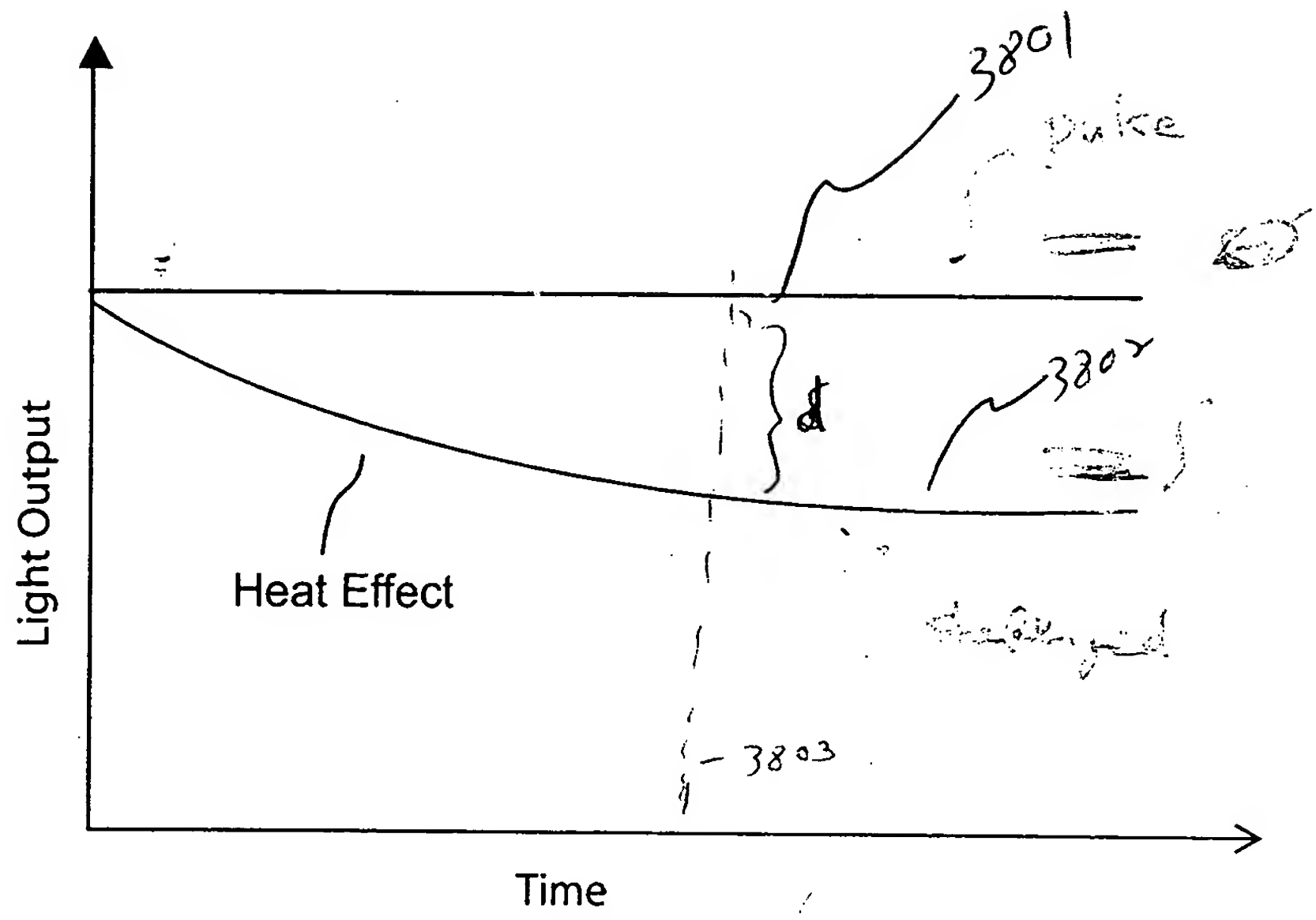


Fig. 38